ASSISTANT SUPERINTENDENT

C. E. McDONALD	Sacramento

TRAINMASTERS

W. G. HOWELL	Stockton
J. J. McNALLY	Oroville
P. F. PRENTISS	Keddie

TERMINAL TRAINMASTERS

H. E. STAPP	Oakland
J. G. NOLTE	Stockton

ROAD FOREMEN OF ENGINES

HUGH ALLEN	Stockton
R. McILVEEN	Stockton
T. D. HUNTER	Oroville
N. F. ROBERTS	Oroville

ASSISTANT TRAINMASTERS

G. H. EVANS	Stockton
L. A. HENRY	Sacramento

ASSISTANT TERMINAL TRAINMASTER

LEROY FOSTER	Oakland

CHIEF TRAIN DISPATCHER

G. S. ALLEN	Sacramento

ASSISTANT CHIEF TRAIN DISPATCHER

E. J. HILLIER	Sacramento

NIGHT CHIEF TRAIN DISPATCHERS

W. S. GRAHAM	Sacramento
P. JOSSERAND	Sacramento

THE WESTERN PACIFIC RAILROAD CO.

WESTERN DIVISION TIMETABLE

36

EFFECTIVE SUNDAY, MAY 30, 1948
AT 12:01 A. M.
PACIFIC STANDARD TIME

FOR THE GOVERNMENT AND INFORMATION
OF EMPLOYES ONLY

H. A. MITCHELL,
Vice-President and General Manager.

E. T. GALLAGHER,
Superintendent of Transportation.

G. W. CURTIS,
Superintendent.

SPEED TABLE

TIME PER MILE	MILES PER HOUR
36″	100
37″	97.3
38″	94.7
39″	92.3
40″	90
41″	87.8
42″	85.7
43″	83.7
44″	81.8
45″	80
46″	78.3
47″	76.6
48″	75
49″	73.5
50″	72
51″	70.6
52″	69.2
53″	67.9
54″	66.7
55″	65.5
56″	64.3
57″	63.2
58″	62.1
59″	61
1′00″	60
1′01″	59
1′02″	58.1
1′03″	57.1
1′04″	56.2
1′05″	55.4
1′06″	54.5
1′07″	53.7
1′08″	52.9
1′09″	52.2
1′10″	51.4
1′11″	50.7
1′12″	50
1′13″	49.3
1′14″	48.6
1′15″	48
1′16″	47.4
1′17″	46.8
1′18″	46.2
1′19″	45.6
1′20″	45
1′25″	42.4
1′30″	40
1′35″	37.9
1′40″	36
1′45″	34.3
1′50″	32.7
1′55″	31.3
2′00″	30
2′15″	26.7
2′30″	24
2′45″	21.8
3′00″	20
3′30″	17.1
4′00″	15
5′00″	12
6′00″	10
7′00″	8.6
7′30″	8
8′00″	7.5
10′00″	6

FIRST SUBDIVISION

EASTWARD

	Symbols, Rule 6 (A).	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS				FIRST CLASS		Distance from San Francisco	Timetable No. 36 May 30, 1948		Distance from Oakland Yard
						54 Fast Freight	62 Fast Freight	40 Exposition Flyer	2 Royal Gorge				
						Leave Daily	Leave Daily	Leave Daily	Leave Daily		STATIONS		
	WFO		Go					PM 6.00	AM 8.25	0.0	**SAN FRANCISCO**	Oakland Ferry	
	RBKP							6.20 PM	8.45 AM	3.5	3.5 **OAKLAND PIER**		
	RBKP		Ow					PM 6.30	AM 8.55	3.5	TO **OAKLAND PIER (SP)**		
Yard Limits	RBKW FTPO	Yard	Md			PM 9.00	AM 5.20	Via SP	Via SP	4.7	2.4 TO **OAKLAND YARD (WP)**		0.0
	I									5.8	1.1 **SP Crossing**		1.1
	I					9.05	5.25	PM 6.38	AM 9.03	5.9	0.1 **CHESTNUT JCT. (SP Conn.)**	Double Track	1.2
	R		Ak			9.10	5.30	s 6.45	s 9.10	6.6	0.7 TO **OAKLAND**		1.9
										7.2	0.6 **SP Crossing**		2.5
	I					9.14	5.34	6.49	9.14	7.7	0.5 **CLINTON (SP X'ing.)**	Absolute Automatic Block System	3.0
						9.22	5.41	6.57	9.23	9.6	1.9 **FRUITVALE**		4.9
										10.3	0.7 **SP Crossing**		5.6
	I									10.6	0.3 **MELROSE (SP X'ing.)**		5.9
	P	69				9.30	5.48	7.02	9.28	11.3	0.7 **KOHLER**		6.6
	IP					9.38	5.54	7.06	9.33	13.7	2.4 **ELMHURST (SP X'ing.)**		9.0
	P		Dr			9.41	5.58	7.09	9.36	14.8	1.1 TO **SAN LEANDRO**		10.1
	P	84	Hy			**9.55**	6.10	7.15	9.44	19.8	5.0 TO **HAYWARD**		15.1
Yard Limits	WP	83	Cn			10.25	**6.40**	**7.29**	9.58	29.7	9.9 TO **NILES**		25.0
	I									30.3	0.6 **SP Crossing**		25.6
	YP									30.5	0.2 **NILES JUNCTION**		25.8
	P	77				10.43	6.57	7.38	10.08	35.6	5.1 **SUNOL**		30.9
	P	76	Tn			10.58	**7.17**	7.45	10.17	40.8	5.2 **PLEASANTON**		36.1
	I									42.7	1.9 **SP Crossing**		38.0
	I									43.0	0.3 **SP Crossing**		38.3
	WP	76	Vn			11.14	7.40	7.53	s 10.27	47.2	4.2 **LIVERMORE**		42.5
	YP	95	N			11.41	8.05	**8.06**	10.42	56.2	9.0 TO **ALTAMONT**		51.5
	P	103				PM 11.58	8.20	8.16	10.53	63.3	7.1 **MIDWAY**		58.6
Yard Limits	WYP	115	Cb			AM 12.16	8.37	8.27	**11.05**	72.3	9.0 TO **CARBONA**		67.6
	P	117	Ky			12.19	8.41	8.29	11.07	73.4	1.1 **LYOTH**		68.7
	I									74.0	0.6 **SP Crossing**		69.3
	P	89				12.25	8.47	8.33	11.11	76.7	2.7 **FITZ**		72.0
	I									84.45	7.75 **SP Crossing**		79.75
	P	108				12.44	9.06	8.45	11.24	85.73	1.28 **LATHROP**		81.03
Yard Limits	P							8.50	11.30	90.3	4.57 **ORTEGA**		85.6
	RBKW FTPO	Yard	Sn			1.00 AM	9.25 AM	8.55	11.35	92.0	1.7 TO **STOCKTON YARD**		87.3
	I									93.2	1.2 **AT&SF Crossing**		88.5
	RKP		Fc					s 9.00 PM	s 11.40 AM	93.8	0.6 TO **STOCKTON**		89.1
						Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily				
						(4.00) 21.8	(4.05) 21.4	(2.30) 36.1	(2.45) 32.8		..........Time over Subdivision.......... ....Average Speed per Hour..........		

Special instructions on pages 2 and 3 will apply to both pages where applicable.

No. 1 and No. 2 will stop on flag at any station to receive or discharge passengers, U. S. mail or express.

No. 39 will stop at Livermore, Niles and Hayward to discharge passengers from Salt Lake City or beyond.

Timetable No. 36

May 30, 1948

WESTWARD

Distance from Oakland Yard	Distance from San Francisco		STATIONS		Distance from Stockton	FIRST CLASS 1 Royal Gorge Arrive Daily	FIRST CLASS 39 Exposition Flyer Arrive Daily	SECOND CLASS 61 Fast Freight Arrive Daily	SECOND CLASS 77 Fast Freight Arrive Daily	SECOND CLASS 53 Fast Freight Arrive Daily
	0.0		**SAN FRANCISCO** 3.5	Oakland Ferry	93.8	AM 9.15	PM 9.05			
	3.5		**OAKLAND PIER**		90.3	8.55 AM	8.45 PM			
	3.5	TO	**OAKLAND PIER (SP)** 2.4		90.3	AM s 8.35	PM s 8.30			
0.0	4.7	TO	**OAKLAND YARD (WP)** 1.1		89.1	Via S P	Via S P	AM 8.15	PM 2.45	PM 10.50
1.1	5.8		**SP Crossing** 0.1		88.0					
1.2	5.9		**CHESTNUT JCT. (SP Conn.)** 0.7	Double Track	87.9	AM 8.23	PM 8.18	8.10	2.40	10.45
1.9	6.6	TO	**OAKLAND** 0.6		87.2	s 8.20	s 8.15	8.05	2.35	10.40
2.5	7.2		**SP Crossing** 0.5		86.6					
3.0	7.7		**CLINTON (SP X'ing.)** 1.9	Absolute Automatic Block System	86.1	8.12	8.07	7.58	2.30	10.35
4.9	9.6		**FRUITVALE** 0.7		84.2	8.07	8.02	7.50	2.21	10.26
5.6	10.3		**SP Crossing** 0.3		83.5					
5.9	10.6		**MELROSE (SP X'ing.)** 0.7		83.2					
6.6	11.3		**KOHLER** 2.4		82.5	8.02	7.57	7.42	2.14	10.19
9.0	13.7		**ELMHURST (SP X'ing.)** 1.1		80.1	7.57	7.52	7.33	2.08	10.13
10.1	14.8	TO	**SAN LEANDRO** 5.0		79.0	7.54	7.49	7.25	2.02	10.07
15.1	19.8	TO	**HAYWARD** 9.9		74.0	7.48	7.43	7.10	1.50	**9.55**
25.0	29.7	TO	**NILES** 0.6		64.1	7.34	**7.29**	**6.40**	1.30	9.35
25.6	30.3		**SP Crossing** 0.2		63.5					
25.8	30.5		**NILES JUNCTION** 5.1		63.3					
30.9	35.6		**SUNOL** 5.2		58.2	7.25	7.19	6.22	1.07	9.12
36.1	40.8		**PLEASANTON** 1.9		53.0	**7.17**	7.10	6.10	12.55	9.00
38.0	42.7		**SP Crossing** 0.3		51.1					
38.3	43.0		**SP Crossing** 4.2		50.8					
42.5	47.2		**LIVERMORE** 9.0		46.6	s 7.08	7.00	5.55	12.40	8.45
51.5	56.2	TO	**ALTAMONT** 7.1		37.6	6.55	6.45	5.30	12.15 PM	**8.06**
58.6	63.3		**MIDWAY** 9.0		30.5	6.44	6.34	4.55	11.40 AM	7.25
67.6	72.3	TO	**CARBONA** 1.1		21.5	6.32	6.22	4.19	**11.05**	6.50
68.7	73.4		**LYOTH** 0.6		20.4	6.30	6.20	4.07	10.40	6.37
69.3	74.0		**SP Crossing** 2.7		19.8					
72.0	76.7		**FITZ** 7.75		17.1	6.24	6.14	4.01	10.30	6.31
79.75	84.45		**SP Crossing** 1.28		9.35					
81.03	85.73		**LATHROP** 4.57		8.07	6.11	6.01	3.44	10.15	6.14
85.6	90.3		**ORTEGA** 1.7		3.5					
87.3	92.0	TO	**STOCKTON YARD** 1.2		1.8	6.00	5.50	3.30 AM	10.00 AM	6.00 PM
88.5	93.2		**AT&SF Crossing** 0.6		0.6					
89.1	93.8	TO	**STOCKTON**		0.0	5.55 AM	5.45 PM			
						Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
			Time over Subdivision Average Speed per Hour			(2.40) 33.9	(2.45) 32.8	(4.45) 18.4	(4.45) 18.4	(4.50) 18.1

Special instructions on pages 2 and 3 will apply to both pages where applicable.

Absolute Automatic Block System. See pages 24 and 25 for special instructions.

Tunnel Signals. See page 13.

Between Chestnut Jct. and Oakland Pier, trains will be governed by SP timetable and rules and regulations of the Transportation Department.

DOUBLE TRACK between Chestnut Jct. and Clinton. South track is Eastward main track and North track is Westward main track. Spring switch at east end of double track. (See instructions page 18 under "SP Crossing MP 7.7, Clinton".)

Rule D-151. Trains must use track in designated direction unless otherwise authorized by train order. Yard engines may move in either direction on either track as authorized in special notice instructions. First-class trains authorized to move against current of traffic must run expecting to find yard engines using main track without flag protection.

Rule D-152. Yard Limit Rule 93 applies on both tracks either direction and flag protection is required only against first-class trains.

A train register for WP trains only is provided at Oakland Pier. In addition to their SP registration, WP trains will register on this register in accordance with their identity on the WP arriving or departing Chestnut Jct. using actual arrival or expected departure time at Chestnut Jct.

When crews of sections of first-class trains terminating at Chestnut Jct. tie up at Oakland Yard, registration will be made at that point and operators at Oakland Yard immediately will telephone such registration to telegraph operators at SP Oakland Pier for entry on WP train register.

Eastward WP trains originating at Oakland Pier must obtain WP clearance card at Oakland Pier and will not require clearance card at Chestnut Jct.

Chestnut Jct. is initial station for eastward first-class trains.

Oakland is register station for first-class trains only.

Eastward first-class trains must not leave Oakland without a clearance card. Other trains will not require a clearance card unless train orders are received.

RULE 83. Eastward first-class trains need not check departure of other eastward first-class trains at Chestnut Jct. When departure of sections of eastward first-class trains has been checked on WP register at Oakland Pier following sections will not require additional check at Chestnut Jct. but must have check before leaving Oakland.

Westward first-class trains will register by ticket at Stockton Yard.

Eastward first-class trains will not register at Stockton Yard, except when crew changes on sections of eastward first-class trains are made there. Conductor going off duty will register in and make notation in extreme left hand column of train register reading "Crew Change Sn Yd." Outgoing conductor will register departure with same notation.

Operator at Stockton will transmit registration of eastward first-class trains to operator at Stockton Yard, who will enter on register with notation in extreme left hand column reading "Stockton Psgr Station" and immediately verify with dispatcher, for information of trains originating at Stockton Yard.

Nos. 39 and 40 register by ticket at Stockton.

SECOND SUBDIVISION

EASTWARD

Timetable No. 36

May 30, 1948

	Symbols, Rule 6 (A).	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS			FIRST CLASS		Distance from San Francisco			Distance from Stockton Yard
				78 Fast Freight	62 Fast Freight	54 Fast Freight	40 Exposition Flyer	2 Royal Gorge			STATIONS	
				Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily				
Yard Limits	RBKW FTPO	Yard	Sn	PM 8.00	AM 11.45	AM 3.20			92.0	TO	**STOCKTON YARD**	0.0
	I								93.2		1.2 **AT&SF Crossing**	1.2
	RKIP		Fc	8.10	11.55	3.30	PM 9.05	AM 11.45	93.8	TO	0.6 **STOCKTON (SP X'ing.)**	1.8
	P	Yard		8.13	AM 11.58	3.33	9.08	11.48	94.3		0.5 **FLORA STREET**	2.3
	I								95.1		0.8 **SP Crossing**	3.1
	P	87		8.19	PM 12.04	3.39	9.14	AM 11.54	98.1		3.0 **HAMMER LANE**	6.1
	P	76	Di	8.31	12.16	3.51	9.21	PM 12.01	104.6	TO	6.5 **KINGDON**	12.6
	YP	34							105.5		0.9 **TERMINOUS JUNCTION**	13.5
	WP	76	Nh	8.48	12.39	4.14	9.32	s 12.12	113.9	TO	8.4 **THORNTON**	21.9
	P	77		8.58	12.49	4.24	9.39	12.19	119.0		5.1 **GLANNVALE**	27.0
	P	76		9.08	12.59	4.34	9.45	12.25	124.4		5.4 **FRANKLIN**	32.4
	P	103		9.28	1.20	**4.55**	9.54	12.34	132.4		8.0 **POLLOCK**	40.4
Yard Limits	RKWF P	Yard	Jy	**10.00**	2.00	5.40	**10.00**	12.40	136.5	TO	4.1 **SOUTH SACRAMENTO**	44.5
	I								137.5		1.0 **CCT and SN Crossing**	45.5
	RI								138.0		0.5 **SP Crossing**	46.0
	KYPO		Sr Ra Ds	10.30	2.10	5.50	s 10.15	s 12.55	138.6	TO	0.6 **SACRAMENTO**	46.6
	I								139.2		0.6 **SN Crossing**	47.2
	I								140.8		1.6 **SN Crossing**	48.8
	P	76		**10.58**	**2.30**	6.19	10.24	1.05	143.8		3.0 **DEL PASO**	51.8
	P	75		11.09	2.41	**6.31**	10.31	1.12	150.6		6.8 **COUNSMAN**	58.6
	I								152.5		1.9 **SN Crossing**	60.5
	WP	75	Gv	11.18	2.51	6.42	**10.37**	1.18	155.6	TO	3.1 **PLEASANT GROVE**	63.6
	P	83		11.28	3.02	6.53	10.44	1.25	161.5		5.9 **TROWBRIDGE**	69.5
	P	76		PM 11.47	3.21	7.12	10.57	**1.38**	172.5		11.0 **EAST ARBOGA**	80.5
Yard Limits	RWIP	110	Ms	AM 12.10	**3.45**	7.40	s 11.10	s 1.50	178.8	Joint Track TO	6.3 **MARYSVILLE**	86.8
	I								180.2		1.4 **SP Crossing**	88.2
	P	76		12.25	4.00	7.55	11.18	1.58	186.0		5.8 **TAMBO**	94.0
	P	76		12.39	4.14	8.09	11.26	2.06	193.0		7.0 **CRAIG**	101.0
	P	97		12.52	4.27	8.22	11.34	2.14	199.3		6.3 **PALERMO**	107.3
Yard Limits	RBKWF ITYPO	Yard	Yd	1.00 AM	4.45 PM	8.30 AM	11.40	2.20	202.9	TO	3.6 **OROVILLE YARD** Interlocking	110.9
	RBKIP	50	Vi				s 11.45 PM	s 2.25 PM	205.1	TO	2.2 **OROVILLE**	113.1
				Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily				
				(5.00) 22.2	(5.00) 22.2	(5.10) 21.5	(2.40) 41.7	(2.40) 41.7			Time over Subdivision Average Speed per Hour	

Second-class and extra trains, Second Subdivision, respect time of first-class trains on the First Subdivision between Stockton and Stockton Yard.

Stockton is register station for first-class trains only.

Operator at Stockton will transmit registration of eastward first-class trains to operator at Stockton Yard, who will enter on register with notation in extreme left hand column reading "Stockton Psgr Station" and immediately verify with dispatcher, for information of trains originating at Stockton Yard.

Second-class and extra trains originating or terminating at Stockton Yard will not require clearance card at Stockton unless train orders are received.

At Flora Street, Track 7, located on north side of main track, west switch at Park Street, east switch immediately west of Harding Way, will be used as siding.

Stockton, South Sacramento, "R" Street Tower, MP 138 Sacramento, and Marysville are register stations for first-class trains only. Nos. 39 and 40 register by ticket at Stockton. First-class trains register by ticket at South Sacramento, "R" Street Tower Sacramento, Marysville and Oroville Yard.

For movement between Oroville Yard and Oroville see pages 26 and 27 for special instructions.

Special Instructions on pages 4 and 5 will apply to both pages where applicable.

SECOND SUBDIVISION

Distance from San Francisco		Timetable No. 36 May 30, 1948 STATIONS	Distance from Oroville	WESTWARD				
				FIRST CLASS		SECOND CLASS		
				1 Royal Gorge	39 Exposition Flyer	77 Fast Freight	53 Fast Freight	61 Fast Freight
				Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily
92.0	TO	**STOCKTON YARD** 1.2	113.1			AM 9.30	PM 5.05	AM 1.45
93.2		**AT&SF Crossing** 0.6	111.9					
93.8	TO	**STOCKTON (SP X'ing.)** 0.5	111.3	AM s 5.50	PM s 5.40	9.20	4.55	1.35
94.3		**FLORA STREET** 0.8	110.8	5.45	5.37	9.17	4.52	1.32
95.1		**SP Crossing** 3.0	110.0					
98.1		**HAMMER LANE** 6.5	107.0	5.38	5.32	9.09	4.44	1.24
104.6	TO	**KINGDON** 0.9	100.5	5.31	5.26	8.58	4.35	1.13
105.5		**TERMINOUS JUNCTION** 8.4	99.6					
113.9	TO	**THORNTON** 5.1	91.2	s 5.19	5.15	8.43	4.20	12.58
119.0		**GLANNVALE** 5.4	86.1	5.10	5.08	8.33	4.10	12.48
124.4		**FRANKLIN** 8.0	80.7	5.04	5.02	8.23	4.00	12.38
132.4		**POLLOCK** 4.1	72.7	**4.55**	4.53	8.00	3.40	12.15
136.5	TO	**SOUTH SACRAMENTO** 1.0	68.6	4.50	4.48	7.50	3.30	12.05 AM
137.5		**CCT and SN Crossing** 0.5	67.6					
138.0		**SP Crossing** 0.6	67.1					
138.6	TO	**SACRAMENTO** 0.6	66.5	s 4.40	s 4.40	7.05	2.45	11.30 PM
139.2		**SN Crossing** 1.6	65.9					
140.8		**SN Crossing** 3.0	64.3					
143.8		**DEL PASO** 6.8	61.3	4.24	4.27	6.44	**2.30**	**10.58**
150.6		**COUNSMAN** 1.9	54.5	4.17	4.20	**6.31**	2.18	10.47
152.5		**SN Crossing** 3.1	52.6					
155.6	TO	**PLEASANT GROVE** 5.9	49.5	4.10	4.14	6.19	2.08	**10.37**
161.5		**TROWBRIDGE** 11.0	43.6	4.02	4.07	6.08	1.57	10.23
172.5		**EAST ARBOGA** 6.3	32.6	3.49	3.54	5.49	**1.38**	10.04
178.8	Joint Track { TO	**MARYSVILLE** 1.4	26.3	s 3.40	**3.45**	5.35	1.20	9.50
180.2		**SP Crossing** 5.8	24.9					
186.0		**TAMBO** 7.0	19.1	3.30	3.35	5.10	12.55	9.25
193.0		**CRAIG** 6.3	12.1	3.22	3.27	4.55	12.41	9.10
199.3		**PALERMO** 3.6	5.8	3.15	3.20	4.40	12.28	8.55
202.9	TO	**OROVILLE YARD** 2.2 Interlocking	2.2	3.10	3.15	4.30 AM	12.20 PM	8.45 PM
205.1	TO	**OROVILLE**	0.0	3.05 AM	3.10 PM			
				Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
		Time over Subdivision Average Speed per Hour		(2.45) 40.5	(2.30) 44.5	(5.00) 22.2	(4.45) 23.3	(5.00) 22.2

SOUTH SACRAMENTO

RULES 221 and 221 (A). Color-light type, electrically-operated train order signal located at South Sacramento.

Passenger trains or freight trains not stopping will not call for or answer train order signal but must obtain clearance card if signal is in STOP position or shows green aspect when first seen.

Freight trains stopping will not call for train order signal but must obtain clearance card before leaving if signal is in STOP position or if it shows green aspect when first seen.

Train order delivery machine attached to signal mast. Two upper hoops are for delivery to enginemen, lower hoop for conductors. When flagman receives copies of orders and train has only one engine middle hoop is for enginemen, top hoop for conductor and lower hoop for flagman.

At South Sacramento and Sacramento, engine whistle should be used only when necessary and then kept as soft as possible consistent with the particular requirement.

RULE 83 (D). Only first-class trains need obtain clearance card at Sacramento.

Joint Track, Marysville. See page 15 for special instructions.

Automatic Block Signals. See page 13.

No. 1 and No. 2 will stop on flag at any station to receive or discharge passengers, U. S. mail or express.

No. 39 will stop on flag at Marysville to discharge revenue passengers and to receive revenue passengers for points where scheduled to stop.

No. 40 will stop at Pleasant Grove to exchange U. S. mail.

Special Instructions on pages 4 and 5 will apply to both pages where applicable.

EASTWARD

	Symbols, Rule 6 (A).	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS					FIRST CLASS		Distance from San Francisco		Timetable No. 36 May 30, 1948		Distance from Oroville Yard
				62 Fast Freight	54 Fast Freight	94 Local Freight	96 Local Freight	78 Fast Freight	40 Exposition Flyer	2 Royal Gorge					
				Leave Daily	Leave Daily	Leave Tues., Thurs., Sat.	Leave Mon., Wed., Fri.	Leave Daily	Leave Daily	Leave Daily			STATIONS		
Yard Limits	RBKWF ITYPO	Yard	Yd	PM 6.30	AM 10.30		AM 7.30	AM 2.00			202.9	TO	OROVILLE YARD	Interlocking	0.0
	RBKIP	50	Vi						PM 11.55	PM 2.35	205.1	TO	2.2 OROVILLE		2.2
	P	87							AM 12.03	2.41	209.3		4.2 QUARTZ	Centralized Traffic Control	6.4
	P	91							12.09	2.46	212.9		3.6 BIDWELL		10.0
	P	86							12.17	2.54	217.6		4.7 BLOOMER		14.7
	WP	93							12.32	3.07	224.1		6.5 BERRY CREEK		21.2
	P	96							12.48	3.21	231.2		7.1 DAVID		28.3
	P	79							12.57	3.29	235.2		4.0 POE		32.3
	WFP	84							s 1.10	3.37	239.3		4.1 PULGA		36.4
	P	82							1.18	3.45	243.5		4.2 CRESTA		40.6
	WP	76							1.28	3.53	247.6		4.1 MERLIN		44.7
	P	58							1.44	4.04	253.1		5.5 TOBIN		50.2
	P	86							1.49	4.09	255.3		2.2 CAMP RODGERS		52.4
	WP	97	Bn						s 2.03	4.20	260.1	TO	4.8 BELDEN		57.2
	P	76							2.15	4.31	264.6		4.5 RICH BAR		61.7
	WP	78							2.31	4.45	270.2		5.6 VIRGILIA		67.3
	P	88							2.41	4.53	273.7		3.5 TWAIN		70.8
	P	87							2.49	5.00	277.3		3.6 PAXTON		74.4
Yard Limits	RKW FTYP	Yard	Kd	PM 11.30	PM 3.30	AM 8.30	12.30 PM	AM 7.00	s 3.10	s 5.15	281.5	TO	4.2 KEDDIE		78.6
	P	87							3.19	5.23	284.5		3.0 SIERRA		81.6
	P	79	Rt						s 3.37	5.30	287.9	TO	3.4 QUINCY JUNCTION		85.0
	P	86							3.48	5.40	292.7		4.8 MASSACK		89.8
	WP	95							s 4.00	5.47	296.4		3.7 SPRING GARDEN		93.5
	P	88	So						s 4.11	5.57	301.7	TO	5.3 SLOAT		98.8
	P	88							4.19	6.04	305.4		3.7 TWO RIVERS		102.5
	WP	101	Ba						s 4.35	s 6.15	310.4	TO	5.0 BLAIRSDEN		107.5
	P	93							4.46	6.23	313.8		3.4 CLIO		110.9
	P	85							4.59	6.32	318.7		4.9 MABIE		115.8
Yard Limits	P										320.04		1.34 DELLEKER	A. B. S.	117.14
	RBKW FTYPO	Yard	Ki	1.30 AM	5.30 PM	11.30 AM		9.00 AM	s 5.10 AM	s 6.40 PM	321.4	TO	1.36 PORTOLA		118.5
				Arrive Daily	Arrive Daily	Arrive Tues., Thurs., Sat.	Arrive Mon., Wed., Fri.	Arrive Daily	Arrive Daily	Arrive Daily					
				(7.00)	(7.00)	(3.00)	(5.00)	(7.00)	(5.15)	(4.05)			Time over Subdivision		
				16.9	16.9	13.3	15.7	16.9	22.1	28.5			Average Speed per Hour		

Schedules shown for first class trains do not confer any superiority whether or not C.T.C. is operative but must be respected by trains operating on such schedules or sections thereof.

(Also see C.T.C.S. Rule 780)

Schedules shown for second class trains do not confer any superiority whether or not C.T.C. is operative and trains must not be operated on these schedules. Times shown are for information only.

Extra trains originating or terminating at Oroville Yard will not require clearance card at Oroville unless train orders are received.

Oroville is register station for first-class trains only.

Keddie is register station for extra trains originating and terminating at Keddie only.

Switch point derail located on NCE lead Keddie Yard between the two crossovers from NCE lead to west end of No. 1 track.

When first-class trains meet at Portola, pocket track in front of depot will be the siding.

No. 1 and No. 40 will stop on flag at any station to receive or discharge passengers, U. S. mail or express.

Slide Detector Fences. See section (H), C.T.C. instructions, page 28.

Centralized Traffic Control. See page 28 for special instructions.

Oroville. For movement between Oroville and Oroville Yard see pages 26 and 27 for special instructions.

Portola. For movement between Delleker and Portola passenger station see page 29 for special instructions.

Special Instructions on pages 6 and 7 will apply to both pages where applicable.

WESTWARD

Timetable No. 36

May 30, 1948

Distance from Oroville Yard	Distance from San Francisco		STATIONS		Distance from Portola	FIRST CLASS		SECOND CLASS				
						39 Exposition Flyer	1 Royal Gorge	53 Fast Freight	93 Local Freight	95 Local Freight	61 Fast Freight	77 Fast Freight
						Arrive Daily	Arrive Daily	Arrive Daily	Arrive Mon., Wed., Fri.	Arrive Tues., Thurs., Sat.	Arrive Daily	Arrive Daily
0.0	202.9	TO	**OROVILLE YARD** 2.2	Interlocking	118.5			AM 11.00		PM 12.50	PM 7.00	AM 2.25
2.2	205.1	TO	**OROVILLE** 4.2		116.3	PM s 3.00	AM s 2.55					
6.4	209.3		**QUARTZ** 3.6	Centralized Traffic Control	112.1	2.51	2.46					
10.0	212.9		**BIDWELL** 4.7		108.5	**2.46**	2.40					
14.7	217.6		**BLOOMER** 6.5		103.8	2.38	2.31					
21.2	224.1		**BERRY CREEK** 7.1		97.3	2.25	2.18					
28.3	231.2		**DAVID** 4.0		90.2	2.11	2.02					
32.3	235.2		**POE** 4.1		86.2	2.03	1.53					
36.4	239.3		**PULGA** 4.2		82.1	1.55	s 1.44					
40.6	243.5		**CRESTA** 4.1		77.9	1.48	1.36					
44.7	247.6		**MERLIN** 5.5		73.8	1.41	**1.28**					
50.2	253.1		**TOBIN** 2.2		68.3	1.30	1.13					
52.4	255.3		**CAMP RODGERS** 4.8		66.1	1.26	1.07					
57.2	260.1	TO	**BELDEN** 4.5		61.3	1.15	s 12.56					
61.7	264.6		**RICH BAR** 5.6		56.8	1.05	12.42					
67.3	270.2		**VIRGILIA** 3.5		51.2	12.54	12.28					
70.8	273.7		**TWAIN** 3.6		47.7	12.48	12.20					
74.4	277.3		**PAXTON** 4.2		44.1	12.42	12.13					
78.6	281.5	TO	**KEDDIE** 3.0		39.9	12.35	s 12.05 AM	7.00 AM	AM 11.30	8.00 AM	3.00 PM	10.30 PM
81.6	284.5		**SIERRA** 3.4		36.9	12.28	11.54 PM					
85.0	287.9	TO	**QUINCY JUNCTION** 4.8		33.5	12.23	s 11.47					
89.8	292.7		**MASSACK** 3.7		28.7	12.17	11.38					
93.5	296.4		**SPRING GARDEN** 5.3		25.0	12.12	s 11.32					
98.8	301.7	TO	**SLOAT** 3.7		19.7	12.04 PM	11.22					
102.5	305.4		**TWO RIVERS** 5.0		16.0	11.59 AM	11.15					
107.5	310.4	TO	**BLAIRSDEN** 3.4		11.0	11.53	s 11.07					
110.9	313.8		**CLIO** 4.9		7.6	11.47	10.57					
115.8	318.7		**MABIE** 1.34		2.7	11.40	10.50					
117.14	320.04		**DELLEKER** 1.36	A. B. S.	1.36							
118.5	321.4	TO	**PORTOLA**		0.0	11.35 AM	10.45 PM	5.00 AM	7.30 AM		1.00 PM	8.25 PM
						Leave Daily	Leave Daily	Leave Daily	Leave Mon., Wed., Fri.	Leave Tues., Thurs., Sat.	Leave Daily	Leave Daily
			Time over Subdivision			(3.25)	(4.10)	(6.00)	(4.00)	(4.50)	(6.00)	(6.00)
			Average Speed per Hour			34.0	27.9	19.8	10.0	16.3	19.8	19.8

Schedules shown for first class trains do not confer any superiority whether or not C.T.C. is operative but must be respected by trains operating on such schedules or sections thereof.

(Also see C.T.C.S. Rule 780)

Schedules shown for second class trains do not confer any superiority whether or not C.T.C. is operative and trains must not be operated on these schedules. Times shown are for information only.

The following will govern use of retainers on westward freight trains, Portola to Bloomer:

When the gross weight of train does not exceed 33 tons per car, turn up retainer valves on first fifteen cars back of engine. When gross weight of train exceeds 33 tons and is less than 45 tons per car, turn up retainer valves on first twenty cars back of engine. When gross weight of train exceeds 45 tons per car, turn up retainer valves on first twenty-five cars back of engine.

Retainer valves are to be used in low pressure position which is horizontal. Should wheels show tendency to heat, retainers will be alternated. If, in judgment of engineer, number of retainers unsatisfactory, engineer may instruct the brakeman to add or subtract as required to keep slack bunched and control train at safe speed while brake pipe pressure is being fully recharged.

Use of dynamic brake on freight trains being handled by Diesel freight engines does not modify requirements pertaining to use of retainers, except when Diesel freight engines, 904 to 912 inclusive are handling westward freight trains of 5000 tons or less with dynamic brake operative, retainers need not be used unless requested by engineer.

Special Instructions on pages 6 and 7 will apply to both pages where applicable.

FOURTH SUBDIVISION

EASTWARD

	Symbols, Rule 6 (A).	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS					FIRST CLASS			Distance from San Francisco (Via NCE Conn.)		Timetable No. 36 May 30, 1948	Distance from Keddie
						154 Western Pacific Fast Freight	178 Western Pacific Fast Freight	556 Southern Pacific Local Freight							
						Leave Daily	Leave Daily	Leave Daily Ex. Sunday						STATIONS	
Yard Limits	RBKW FTYP	Yard	Kd			PM 7.30	AM 4.10					280.8	TO	KEDDIE	0.0
	P	89				7.55	4.35					287.0		6.2 MOCCASIN	6.2
	P	16	Cm			8.01	4.41					289.4	TO	2.4 CRESCENT MILLS	8.6
	WP	89	Gi			8.15	4.55					295.5	TO	6.1 GREENVILLE	14.7
	P	89				8.25	5.05					298.3		2.8 COHALA	17.5
	WYP	89				9.05	5.40					306.2		7.9 ALMANOR	25.4
	P	89				9.25	6.05					313.2		7.0 LASSEN VIEW	32.4
Yard Limits	P					9.35	6.15					316.0		2.8 CLEAR CREEK JCT. (ARR Conn.)	35.2
Yard Limits	RBK WFYP	Yard	Wd			10.10	6.50	AM 6.15				320.2	Joint Track TO	4.2 WESTWOOD	39.4
	RP		Mn			10.25	7.05	6.30 AM				324.3	Joint Track TO	4.1 MASON (SP Conn.)	43.5
	P	89				10.27	7.07					324.9		0.6 ROBBERS CREEK	44.1
	PY	89				10.57	7.37					333.3		8.4 NORVELL	52.5
	P	89				11.25	8.05					343.7		10.4 LODGEPOLE	62.9
Yard Limits	WYP	89	Hf			PM 11.59	8.40					357.2	TO	13.5 HALLS FLAT	76.4
	P	89				AM 12.20	9.00					365.0		7.8 JELLICO	84.2
	P	89				12.38	9.18					371.0		6.0 WILLOW SPRINGS	90.2
	W at MP 96.0 P	89				1.00	9.40					375.6		4.6 LITTLE VALLEY	94.8
	P	89				1.25	10.05					381.7		6.1 DIXIE	100.9
	P	89				1.50	10.30					390.3		8.6 PIT RIVER	109.5
Yard Limits	RBKW FYPO	Yard	B			2.00 AM	10.40 AM					392.6	TO	2.3 BIEBER	111.8
						Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday							
						(6.30) 16.9	(6.30) 16.9	(0.15) 16.4						............Time over Subdivision............ ....Average Speed per Hour........	

Western Pacific trains may carry passengers.

On passenger trains, before descending grades Almanor to Greenville and Halls Flat to Little Valley, understanding must be had between conductor and engineer as to number of retainers necessary to control train.

On eastward freight trains before leaving Halls Flat and on westward freight trains before leaving Almanor, enginemen must be notified as to number of loads, empties and tons in train and whether all air brakes are cut in and operative.

All retainer valves will be turned up on westward freight trains between Almanor and Greenville.

On westward freight trains between Dixie and Little Valley, between Norvell and Almanor and between Moccasin and Keddie and on eastward freight trains between Dixie and Pit River, an understanding must be had between conductor and engineer as to number of retainers necessary to control train and they must be used accordingly.

On eastward freight trains between Halls Flat and Little Valley, if gross weight of train does not exceed 33 tons per car, turn up retainer valves on the first 20 cars back of engine. If gross weight of train exceeds 33 tons per car and is less than 45 tons per car, turn up retainer valves on first 25 cars back of engine. If gross weight of train exceeds 45 tons per car, turn up retainer valves on first 30 cars back of engine.

When retainer valves are turned up, handle will be placed in low pressure position, which is horizontal, and should wheels show tendency to heat, retainers must be alternated. If, in the judgment of the engineer, number of retainers are unsatisfactory, engineer may instruct the brakeman to add or subtract, as required, to keep slack bunched and to control train at safe speed while brake pipe pressure is being fully recharged.

Use of dynamic brake on freight trains being handled by Diesel freight engines does not in any way modify requirements pertaining to use of retainers, except between Halls Flat and Little Valley when Diesel freight engines with dynamic brake operative are handling eastward freight trains of 3400 tons or less, retainers need not be used unless requested by engineer.

Special Instructions on pages 8 and 9 will apply to both pages where applicable.

FOURTH SUBDIVISION

WESTWARD

Distance from San Francisco (Via NCE Conn.)		Timetable No. 36 May 30, 1948	Distance from Bieber	FIRST CLASS			SECOND CLASS							
							153 Western Pacific Fast Freight	555 Southern Pacific Local Freight	177 Western Pacific Fast Freight					
		STATIONS					Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily					
280.8	TO	**KEDDIE** 6.2	111.8				AM 7.00		PM **7.30**					
287.0		**MOCCASIN** 2.4	105.6				6.36		7.05					
289.4	TO	**CRESCENT MILLS** 6.1	103.2				6.29		6.58					
295.5	TO	**GREENVILLE** 2.8	97.1				6.18		6.45					
298.3		**COHALA** 7.9	94.3				6.00		6.25					
306.2		**ALMANOR** 7.0	86.4				**5.40**		6.05					
313.2		**LASSEN VIEW** 2.8	79.4				5.10		5.37					
316.0		**CLEAR CREEK JCT. (ARR Conn.)** 4.2	76.6				5.00		5.30					
320.2	Joint Track TO	**WESTWOOD** 4.1	72.4				4.50	AM 5.50	5.20					
324.3	TO	**MASON (SP Conn.)** 0.6	68.3				4.30	5.35 AM	5.00					
324.9		**ROBBERS CREEK** 8.4	67.7				4.28		4.58					
333.3		**NORVELL** 10.4	59.3				4.05		4.35					
343.7		**LODGEPOLE** 13.5	48.9				3.40		4.10					
357.2	TO	**HALLS FLAT** 7.8	35.4				3.10		3.40					
365.0		**JELLICO** 6.0	27.6				2.25		2.55					
371.0		**WILLOW SPRINGS** 4.6	21.6				1.58		2.28					
375.6		**LITTLE VALLEY** 6.1	17.0				1.45		2.15					
381.7		**DIXIE** 8.6	10.9				**1.25**		1.55					
390.3		**PIT RIVER** 2.3	2.3				12.45		1.15					
392.6	TO	**BIEBER**	0.0				12.30 AM		1.00 PM					
							Leave Daily	Leave Daily Ex. Sunday	Leave Daily					
		............Time over Subdivision............ ....Average Speed per Hour........					(6.30) 16.9	(0.15) 16.4	(6.30) 16.9					

In Bieber Yard trains will be governed by Great Northern timetable and transportation rules. Rule 93, Great Northern Transportation Rules, reads as follows: "Within yard limits the main track may be used, clearing first-class trains when due to leave the last station where time is shown, but not less than five minutes. In case of failure to clear the main track, protection must be given as prescribed by Rule 99. Within yard limits the main track may be used without protecting against second and inferior class, extra trains and engines. Second and inferior class, extra trains and engines must move within yard limits at restricted speed. When running against the current of traffic or on a portion of two or more tracks used as a single track, all trains and engines must move within yard limits at restricted speed."

Southern Pacific and Fruit Growers Supply Co. trains will be governed by Western Pacific timetable and rules and regulations of the Transportation Department.

Keddie. Normal position of switch leading from east leg of wye to Fourth Subdivision, lined for east leg of wye. Single switch indicator located at this switch.

Switch point derail located on NCE lead Keddie Yard between the two crossovers from NCE lead to west end of No. 1 track.

Automatic Block Signals. See page 13.

Clear Creek Junction. Normal position junction switch lined for Western Pacific main track.

Westwood. Nos. 153, 154, 177 and 178 register by ticket.

Track 4 will be used as siding, but must not be blocked between 6:01 AM and 7:30 AM.

Mason. Dispatchers may, when necessary, issue train orders to westward trains at Mason restricting them at Robbers Creek. Westward trains finding train order signal at Mason in STOP position will not pass fouling point west switch Robbers Creek until ascertain reason for signal being in stop position. See Rule 221.

Train order signal governs all trains except westward Southern Pacific trains. Westward Southern Pacific trains must obtain clearance card.

Register station for Nos. 555 and 556 only. Nos. 555 and 556 may register by ticket when there is an operator on duty.

Westward second-class and extra trains need not check register for Southern Pacific train No. 555.

Nos. 153 and 177 need not check register for Southern Pacific train No. 556.

Western Pacific trains will approach junction switch under control, being sure switch is right and that Southern Pacific trains are clear of junction switch before using. Normal position junction switch is lined for Western Pacific main track.

Special Instructions on pages 8 and 9 will apply to both pages where applicable.

First Subdivision "A"—SAN JOSE BRANCH

	EASTWARD									WESTWARD	
	Symbols, Rule 6 (A).	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS 254 Freight Leave Daily	FIRST CLASS	Distance from Niles Junction		Timetable No. 36 May 30, 1948 STATIONS	Distance from Alameda St. Freight Station	FIRST CLASS	SECOND CLASS 253 Freight Arrive Daily
Yard Limits	RWP	83	Cn	AM 12.30			TO	NILES			PM 10.45
	YP			12.40		0.0		0.8 NILES JUNCTION	23.0		10.25
	P	29		1.00		3.3		3.3 IRVINGTON	19.7		10.10
		Spur 1W 6		1.15		6.8		3.5 WARM SPRINGS	16.2		9.55
		Spur 1E 4		1.22		8.0		1.2 CURTNER	15.0		9.50
	P	31		1.35		10.9		2.9 MILPITAS	12.1		9.40
		Spur 1E 10		1.45		14.1		3.2 BERRYESSA	8.9		9.25
Yard Limits				2.00		16.9		2.8 SAN JOSE (East Santa Clara St.)	6.1		9.10
	RBKW FTPO	Yard	Sx	2.10 AM		17.5	TO	0.6 SAN JOSE YARD	5.5		9.00 PM
						19.5		2.0 SP TRANSFER	3.5		
						19.6		0.1 VALBRICK (SP X'ing.)	3.4		
	I					20.2		0.6 SP Crossing	2.8		
	I					22.3		2.1 SP Crossing	0.7		
		Yard				23.0		0.7 SAN JOSE (Alameda St. Fr't. St'n.)	0.0		
				Arrive Daily							Leave Daily
				(1.30) 11.6				........Time over Subdivision........ ....Average Speed per Hour........			(1.25) 12.4

San Jose Branch trains have no timetable superiority between Niles Junction and Niles. Their movement between these points will be in accordance with Rule 93 and A.A.B.S. signals and rules. Time shown at Niles is for information only.

First Subdivision "B"—CARBONA BRANCH

Timetable No. 36

May 30, 1948

EASTWARD							WESTWARD
	Symbols, Rule 6 (A)	Car Capacity of Sidings	Telegraph Office Calls	Distance from Carbona		STATIONS	Distance from Moy
Yard Limits	WYP	115	Cb	0.0	TO	CARBONA	4.2
						1.7	
		66		1.7		KERLINGER	2.5
						1.7	
	PO	Spur 1W 52		3.4		RIVER ROCK	0.8
						0.8	
		No Siding		4.2		MOY	0.0

Derails located on main track 60 feet west of Tracy Rock and Gravel Company switch, MP 3.3 and 240 feet west and 885 feet east of Stock Yards Moy. Cars on main track east of River Rock not protected.

RULE 201. Train order authority will not be required on Carbona Branch and all movements will be in accordance with provisions of Transportation Rule 93.

Second Subdivision "A"—TERMINOUS BRANCH

Timetable No. 36

May 30, 1948

EASTWARD						WESTWARD
	Symbols, Rule 6 (A)	Car Capacity of Sidings	Telegraph Office Calls	Distance from Terminous Jct.	STATIONS	Distance from Terminous
	YP	34		0.0	TERMINOUS JCT.	7.8
					3.5	
		19		3.5	GARDEN	4.3
					3.1	
Yard Limits		6		6.6	GRASS	1.2
					1.2	
	WY	Yard	Us	7.8	TERMINOUS	0.0

GENERAL

RULE 2 (A). Modified to the extent that watches subject to inspection need be presented to an authorized inspector only once per month. Such inspection must be made between the 1st and 15th of each month except at points covered by traveling inspectors.

RULE 6 (A). Symbol TO to left of station name indicates Train Order Office.

RULE 10 (J). On Western Division slow boards, when used, will be placed one-half (½) mile from structure or track over which speed of train must be reduced. "Resume speed" boards, when used, will be located at point where speed may be increased after rear of train has passed.

RULE 11. Second paragraph reading "Outside of block system or signal dispatching limits, a train finding a fusee burning on or near its track must stop and not proceed until it has burned out" applies at all points on Western Division except in C.T.C. Territory between Oroville and Delleker and in A.A.B.S. territory on First Subdivision.

RULE 11 (A). Outside block system limits and on Third Subdivision fusees may be placed between rails of track when necessary to avoid danger of fire. If train overruns a lighted fusee, it must be removed from under train at once. On Third Subdivision, freight trains finding burning fusee between rails must stop and have fusee removed at once before proceeding under first paragraph Rule 11.

RULE 16 (f). When train order is received indicating that main track is out of service and that trains are to be detoured through a siding or other track, or over a shoofly, necessitating a reduction in normal train speed, signal 16 (f) must be sounded on passenger trains one mile before reaching point where train must reduce speed, which must be acknowledged by whistle signal 14 (g).

RULE 17. Oscillating white light on engines so equipped is to be operated in addition to headlight, when engine is moving at night, and in foggy or stormy weather by day. It must be extinguished approaching passenger stations.

Oscillating red light on engines so equipped shall be operated by day or night, only when a train has stopped, or is stopping, under circumstances that may cause an adjacent track to be fouled, and will not in any way relieve trainmen and enginemen from compliance with Rules 99 and 102. A train or engine on adjacent track must stop at once, and may proceed only after ascertaining that track is safe for passage of trains.

RULES 17, 17(C) and S-17. Except as otherwise provided in Rules 17, 17(C) and S-17, enginemen operating locomotives in passenger or freight service, or running light will display headlights during daylight hours as well as night hours.

RULES S-17 and 99. Figures indicating "Car Capacity of Sidings" are number of cars, based on an average allowance of 48 feet per car, that tracks will hold between clearance points, not including engines and cabooses. Due to increased number of 50 foot and longer cars being handled, trains may find sidings inadequate between clearance points. Care must be taken to see that flag protection is furnished when taking siding to meet trains and headlights must not be extinguished until it is known that train is clear of the main track. The conductor or brakeman at rear end must see that proper signal, day or night, is given to head end when train is clear of main track.

After train comes to rest in the siding, the head end must receive a stop signal from the rear end indicating that train is clear of the main track. Until such signal has been received by head end, headlight will be displayed and flag protection provided.

RULE 17 (D). In light engine movements between Oakland Roundhouse and Chestnut Junction in either direction in connection with moves to or from Southern Pacific Oakland Pier white light (lantern) may be displayed on rear of tender instead of red light.

RULE S-72. WESTWARD TRAINS ARE SUPERIOR TO EASTWARD TRAINS OF THE SAME CLASS.

RULE 104 (C). Switches at various locations near road crossings are equipped with Safety Switch Locks. To use any switch so equipped unlock both standard switch stand and safety switch lock and step on treadle to release safety device. When use of switch is complete, both switch stand and safety switch lock must be locked.

RULE 104 (G). Double or triple loads must not be kicked or dropped. Open top cars on which load is likely to shift must not be kicked or dropped against other cars.

RULE 221. Telegraphers must not signal trains in connection with delivery of train orders. If there is no restriction at that station, telegrapher may hand up the orders without stopping train, but should not signal the train to come down the main track either by raising and lowering the train order signal or by hand signals.

RULE 509. An automatic block signal with a triangular number plate bearing the letter "P" in addition to signal number or an absolute signal equipped with triangular letter plate bearing the letter "P", is also actuated by some special protective device.

Block signals or absolute signals so equipped include in their circuits protective devices known as "Slide Detector Fences".

When these signals indicate STOP such additional inspection as necessary to insure safety of proceeding must be made of slide detector fences and tracks in their vicinity. When circumstances require train must be preceded by flagman.

RULE 834. Following signals will be used to notify crews of passing trains of defective conditions:

Hot Journals......	By Day—Nose held with one hand with other hand pointing toward track. By Night—Stop Signal.
Brakes Sticking ...	By Day—Hands shoved in sliding motion out from body. By Night—Stop Signal.
Broken Wheels	Stop Signal.
Defective Truck	
Dragging Brake Connection	
Lading shifted over Side or End of Car	
Swinging Car Door or Other Dangerous Condition.	

RULE 835. Cabooses must not be kicked or dropped against other cars, nor other cars kicked or dropped against them.

When a caboose is kicked or dropped, a member of the crew must ride it. Hand brake must be tested before movement is started.

When coupling to a caboose, or coupling a caboose to other cars, movement must be stopped about ten feet from coupling and then moved slowly to a coupling.

If practicable, occupants of caboose must be warned in advance of impending couplings.

Persons occupying cabooses must brace themselves and remain seated while coupling is being made.

Switching at terminals with a caboose between engine and cars or with cars and caboose ahead of engine is prohibited except a cut of cars may be pulled with caboose to point where caboose is to be set over.

RULE 838. The use of helper engines behind cabooses is prohibited except in emergency when it may be impossible to handle otherwise.

RULE 882. No person will be permitted to ride on an engine without a written order from the Vice President and General Manager, except employes in the discharge of their duties and those holding transportation endorsed to that effect.

RULE 927—TRAIN INSPECTION. When conditions are favorable and in judgment of conductor it is safe to do so, run may be made for train inspection on freight and mixed trains on First and Second Subdivisions, from one water stop to next water stop, except a maximum distance of 70 miles must not be exceeded between inspections. When conditions are favorable and in judgment of conductor it is safe to do so, run may be made on freight and mixed trains on Third and Fourth Subdivisions without stopping for train inspection for a maximum distance of 45 miles, except a standing or rolling inspection must be made on westward freight and mixed trains at Blairsden, Two Rivers or Sloat and at Halls Flat, Westwood, Almanor and Greenville and on eastward freight and mixed trains at Keddie or at some point between Keddie and Spring Garden and at Westwood and Halls Flat.

Trains containing carload shipments of TNT, bombs, loaded projectiles and other such articles of a highly sensitive nature must be stopped for inspection at intervals of not to exceed 50 miles unless all such cars are loaded less than 65 percent of marked capacity.

AIR BRAKE RULES

RULE 24-B. On passenger trains at points where terminal tests are made, when the continuity of the brake pipe is not disturbed, or motive power not changed, the incoming engineman, after making station stop as prescribed by the rules, must apply the train brakes with a 15 pound brake pipe reduction immediately after stopping and without waiting for a signal.

The brake pipe leakage must be noted, then the reduction increased to a total of 20 pounds. The incoming engineman will notify the outgoing engineman the amount of brake pipe leakage.

Release of the train brakes will be made upon receiving the proper release signal.

RULES 43-A and 43-B. Freight trains originating or picking up and setting out cars at South Sacramento will make air test under these rules.

RULE 43-B. On trains originating at Keddie, rear end test will be made under this rule.

RULE 44. Running brake test will be made on eastward passenger trains leaving Oakland Pier or Oakland Yard and on westward passenger trains not less than two or more than three miles before reaching SP Crossing MP 13.7.

Running brake test other than above will not be required for crossings between MP 5.8 and MP 13.7 inclusive.

AUTOMATIC BLOCK SIGNALS

Marysville. See special instructions page 15 under Joint Track Marysville.

Oroville Yard. See special instructions governing movements between Oroville Yard and West End C.T.C., pages 26 and 27 for location and limits.

Keddie. Fourth Subdivision:
Eastward: Two-position color-light signal at west portal Tunnel 1.
Westward: Three-position color-light signal 45 feet east of Tunnel 2.
Two-position color-light signal 60 feet east of east wye switch.

TUNNEL SIGNALS

Two-position, color-light, automatic block signals located 1680 feet west of west portal Tunnel 1 and 50 feet east of east portal Tunnel 2 for protection through tunnels.

DRAWBRIDGE SIGNALS

San Joaquin River Drawbridge MP 80.28. Interlocked.

Home signals 650 feet east and 600 feet west of bridge are two-position, color-light, semi-automatic (SA) signals and indicate position of draw.

Three-position, color-light, automatic block signals 823, located 9300 feet east of east home signal, and 786, located 8100 feet west of west home signal, are approach signals for westward and eastward trains.

FIRST SUBDIVISION

Oakland. Street Crossing at Third and Broadway must not be blocked.

A westward first-class train finding an eastward first-class train at passenger station will not pass Franklin St. until eastward train leaves station. An eastward first-class train finding a westward first-class train at passenger station will not pass Clay St. until westward train leaves station.

Joint WP and SP drill track between Melrose and Elmhurst must not be used for meeting or passing trains. Crossover between drill track and west end of Elmhurst siding must not be used by road crews. Normal position at west end of crossover lined for drill track and at east end lined for crossover.

Kohler. Seminary Avenue crossing is protected by flashing light signals, but trains and yard engines using this siding must cut crossing when blocked more than five minutes.

85th Avenue, Oakland. Any engines or cars moving over spur serving California Packing Corporation must be under control and highway traffic protected by member of crew.

Hayward. Freight trains doing switching will leave train outside of limits of bonded rails operating crossing bells at "A," "B" and "C" Streets and will use engine whistle and bell only when necessary to comply with the Rules.

Dispatcher's telephone installed in baggage room.

Hayward, Pleasanton and Livermore. East siding switches are west of passenger stations.

Niles. Westward steam powered trains except regular No. 1 and regular No. 39 will take full tank of water.

Tunnel 1. Headlights and markers must be burning through Tunnel 1.

Sunol. Cars must not be left on house track spur within 75 feet of either side of Crossing No. 4-36.0.

Altamont. Under no circumstances may cars be left on either leg of wye.

Carbona. Normal position of all switches leading from siding is lined for the siding. Normal position of the east house track switch and of the two inside crossover switches east of depot is for east leg of wye and storage track. When not in use these switches must be left lined for the normal route. Track on north side of main track may be used as an auxiliary siding. (See paragraph (N) page 24.)

Engines must move with extreme caution not exceeding 3 MPH while moving over frogs and switches and around curves on Tomato Spurs.

Army Supply Depot. A tail track, capacity 54 cars, is connected with switching track at west end. Normal position of all switches in switching track or tail track is lined for switching track. Do not exceed 10 miles per hour on interchange trackage with Army Supply Depot. (See paragraph (R) page 25.)

Ortega. Siding is a storage track. It must not be used by road crews as entrance or departure track to or from Stockton Yard.

Stockton Yard. Forty car siding on south side of main track between MP 92.09 and MP 92.54 will be known as "Diner Siding Stockton Yard." Trains may meet or be restricted at this siding by train order. Unless otherwise specified as above, timetable and train order times of first-class trains at Stockton Yard will apply at lead switches MP 91 and Charter Way.

SECOND SUBDIVISION

Stockton Yard. Westward freight trains will enter Stockton Yard at lead switch immediately west of Charter Way, MP 92.7.

Stockton. Engines and cars must be brought to a stop at Country Club Highway crossing on North Channel Line and must be preceded by flagman over crossing.

Bridge over Smith Canal, North Channel Line, will not clear man on top of high car.

Terminous Jct. Road Crossing No. 4-105.7 must not be blocked more than five minutes. When a train stops at Terminous Jct. and there are three brakemen in crew, one brakeman must protect this crossing during time train is not cut.

South Sacramento. The first street crossing west of South Sacramento, Sutterville Road, must not be blocked by freight trains taking water, oil, or doing work. Eastward freight trains will, when necessary to avoid blocking this crossing, leave train west of crossing while taking water or oil, or switching.

Sacramento. Trains or engines must not exceed eight miles per hour over street crossing at 5th and "R" Streets.

Westward passenger engines and trains must not leave depot until engineer knows that wigwag on "K" Street is in motion and eastward passenger engines and trains must not leave depot until engineer knows that wigwag on "J" Street is in motion. If wigwag fails to operate a member of crew must precede engine or train over crossing.

When road engines are detached from eastward passenger trains to permit yard engine to perform switching, road engine must move beyond alley between "G" and "H" Streets. This will actuate crossing signals at "H" Street on return movement westward after yard engine is into clear with switch closed.

Marysville. Spur track known as Cliff House Spur will not hold more than ten cars.

Joint Track Marysville. Sacramento Northern trains operate over Western Pacific main track between junction switches 356 feet east and 355 feet west of Bridge 178.18, Yuba River. Sacramento Northern freight trains operate over WP siding between west switch and switch leading to Sacramento Northern track opposite Western Pacific passenger station, Marysville. These tracks are designated as Joint Tracks.

Derail switch on siding 193 feet east of switch, pipe connected and operated with main track switch.

Junction switches must be locked for Western Pacific main track when not in use.

Movement of Trains over Joint Track will be governed by Rule 663 and made in accordance with indication of signals regardless of superiority. All trains of both railroads must approach and pass through limits of Joint Track with caution, not exceeding 25 miles per hour. In using Joint Track freight trains should avoid delays to other trains of either railroad.

Crossing of Sacramento Northern Passenger Track over Western Pacific House Track, 752 Feet East of Br. 178.18. Engines, cars or trains moving on Sacramento Northern passenger track must be brought to a stop at STOP signs 100 feet each side of crossing and preceded over crossing by member of crew. Engines, cars or trains operating on Western Pacific house track must approach with caution and be sure it is safe to proceed before moving over crossing.

Automatic Interlocking signals (color light type) govern Joint Track operation as follows:

Eastward. Distant signal MP 177.2, 4528 feet west of home signal. Home signal 777 feet west of Bridge 178.18. Semi-automatic (SA) Home Signal located 45 feet west of SN junction switch east of Bridge 178.18.

Westward. Home signal 722 feet east of Bridge 178.18.

Double Switch Indicators.

SN junction switches east and west of Bridge 178.18.

West siding switch.

West switch interchange track.

Automatic Block Signals (color light type) located as follows:

Eastward. Signal 1772, which is interlocking distant signal, is also three-position automatic block home signal for eastward trains. All trains must approach this signal prepared to stop if indication displayed per Rule 501, Fig. 5. Signal is approach lighted; length of approach circuit 4022 feet. Sign reading "ABS 4000 feet" located 4000 feet west of signal.

Home signal MP 178.8. Home signal MP 179.4, 255 feet west of east siding switch. This signal also indicates position of west interlocking home signal Binney Jct.

Dwarf signal between main track and siding 223 feet west of east siding switch governs movements eastward from siding to main track and also indicates position of west interlocking home signal Binney Junction when switch lined for movement and after control time has elapsed. Double switch indicator located at east siding switch.

Westward. Home signals MP 179.5 and MP 178.9.

Double Switch Indicators.

East switch interchange track.

Crossover near passenger station (governs both switches).

Crossover MP 179 (governs both switches).

Switch of SP interchange track.

East siding switch.

East high line switch MP 179.7.

THIRD SUBDIVISION

Headlights and markers must be burning through Tunnels 4, 5, 23, 33 and 35.

Land. Engines heavier than C-43 class must not use tracks 2, 3 and 4 except at west end of yard on tangent track.

C-43 and smaller class engines may use all tracks in entire yard at a moderate speed and may use east lead as far as a derail and a sign reading "WPRR engines must not go beyond this point" located 125 feet east of extreme east switch of interchange yard with the Feather River Railway Co.

No. 1 track, which is a crossover from siding to east end of yard, and No. 2 track used as a run around track, must be left clear. All classes of engines may use siding entire length.

Blinzig. Water may be obtained at Blinzig, MP 228.6.

Keddie. When calling in flagman from east on Fourth Subdivision enginemen will sound six long blasts of whistle.

Blairsden. Mallet and Mikado engines may use house track at Blairsden. Trains setting out or picking up on this track must have air cut through and operative.

Movement over Mill track between Blairsden and Graeagle must be made with air cut through and operative.

A sign reading "TRAINMEN PROHIBITED FROM RIDING CARS BEYOND THIS POINT" erected over tracks at a point approximately 60 feet in advance of log rollway at plant of California Fruit Exchange, Graeagle. Sign to be illuminated at night. Trainmen must obey this sign in interest of SAFETY.

On Graegle Spur do not exceed 8 MPH between main track switch and derail at switch leading to box factory and 4 MPH beyond this derail.

Crews spotting moulding mill at Graegle must hold onto nine cars including cars to be spotted.

FOURTH SUBDIVISION

Headlights and markers must be burning through Tunnels 1, 2, 3, 6 and 8.

Keddie. When calling in flagmen from east on Fourth Subdivision enginemen will sound six long blasts of whistle.

Box. Engines or cars must not be moved over highway crossing on Box Spur just east of Greenville without being brought to a stop and highway traffic protected in both directions by a member of crew.

Clear Creek Junction. The 33-car siding is the interchange track with Almanor Railroad Company and trackage between Western Pacific main track switch and yard limit board 2000 feet beyond end of the 33-car siding toward Chester is joint track for interchange purposes. Operation over this trackage is under transportation rules governing operations within yard limits. Switch point derail on Almanor RR main track 400 feet from junction switch.

Westwood. Following instructions govern movements over crossings at Veneer Plant and Third Street (east and west of passenger station):

Trains meeting at Westwood must not block these crossings. Trains or engines using main track over crossings will run prepared to stop before hitting anything on or about to use the crossings. Between the hours of

7:20 a.m. and 7:30 a.m. 12:20 p.m. and 12:30 p.m.
11:30 a.m. and 11:40 a.m. 4:30 p.m. and 4:40 p.m.

trains stopping at Westwood must not block crossings any part of the periods specified, waiting back of crossings if necessary. Any movements over crossings between these times must be preceded by flagman. Gate tender at Third Street crossing on duty continuously.

Any crossing must be cut immediately upon request of plant gate watchman for impending movement of ambulance or fire apparatus and kept clear until released by him.

Movements of trains or engines on any tracks other than main track over any crossings in yard must be preceded by flagman.

Derail on west end F. G. S. Co. electric siding must be kept in derail position when cars are on siding. East switch of F. G. S. Co. electric siding must be left lined for siding. Derails adjacent to main track on both legs of F. G. S. Co. wye. Switch leading from west end of house track to gravel bin spur must be left lined for gravel bin spur to serve as derail.

Little Valley. Water at MP 96.0, Little Valley, not suitable for human consumption. Water peddlers and gang water cars must not be filled at this point.

RULE 840. When cars are set out at Cohala, Jellico, Willow Springs or Little Valley, in addition to provisions of Rule 840, lower car must be chained to rail and Dispatcher notified.

INTERLOCKING PLANTS AND SIGNALS AND RAILROAD CROSSINGS NOT INTERLOCKED

MP 5.8—SP Crossing and MP 5.9—Chestnut Junction, Magnolia Tower. Interlocked.

Eastward: Two arm home signal 700 feet west of crossing; upper arm governs movement to eastward main track; lower arm governs movement on main track to westward main track. Dwarf signal 490 feet west of crossing governs movement from siding eastward to eastward main track or to westward main track. No distant signals.

Westward: Home signals (on bracket mast) 750 feet east of crossing. Arm to right governs movement from westward main track over junction switch to SP or WP Yards. Arm to left governs movement from eastward main track over junction switch to SP. Suspended home signal governs movement eastward main track to WP Yards. No distant signals.

Eastward whistle signals: Old Yard to eastward main track — One long; to westward main track — One long, one short and one long. No. 1 track old yard to eastward main track — One short and one long; to westward main track — One short, one long and one short.

MP 7.2 SP Crossing. Eastward and Westward Main Track. Not interlocked. Trains must approach under control and not proceed over this crossing unless it is known to be clear.

MP 7.7 Clinton, SP Crossing. Interlocked. Color-light type home signals 565 feet east of crossing, 440 feet west of crossing on eastward main track and dwarf signal between main tracks 240 feet west of crossing on westward main track.

Three-position, color-light, Automatic Block Signal 83, 2000 feet east of east home signal and Automatic Block Signal 74, 1450 feet west of west home signal, are approach signals for westward trains and for eastward trains on eastward main track. No approach signal for eastward trains on westward main track.

Home signals west of crossing, both eastward main track signal and westward main track dwarf signal, are semi-automatic (SA) absolute block signals. When these signals indicate STOP trains will be governed by Rules 663 and 311.

Home signal east of crossing is a two-unit interlocking signal with "S" unit on mast. Upper unit governs movement over crossing to westward main track. Lower unit governs movement over crossing to eastward main track after spring switch has been lined. When this signal indicates STOP trains will be governed by Rule 663 and, in addition, spring switch must be examined and points found to fit properly for movement desired.

Spring switch located 60 feet west of crossing at east end of double track. Normal position lined for westward main track. Eastward trains and engines may trail through switch but if stopped before movement is completed switch must be thrown by hand and secured before further move is made.

The "S" unit on mast of interlocking home signal east of crossing is controlled by the train dispatcher and must be illuminated before spring switch is changed for a westward move. After switch is changed lower unit will display indication. Trains or engines moving from westward main track to eastward main track or vice versa must move beyond home signal east of crossing and receive proper signal indication for reverse move.

When spring switch is thrown by hand it must be returned by hand to normal position after movement is completed. Running switches must not be made over spring switch and sand must not be used between home signals governing movement over switch and crossing.

Telephones for communicating with train dispatcher are located adjacent to home signals either side of crossing.

MP 10.3 SP Crossing. Not interlocked. Trains must approach under control and not proceed over this crossing unless it is known to be clear.

MP 10.6 and MP 10.7 Melrose Tower, SP Crossings. Interlocked. Home signals 450 feet west of crossing MP 10.6. Distant signal 2000 feet west of home signal. Home signal 685 feet east of crossing MP 10.7. Distant signal 2500 feet east of home signal.

MP 13.7 Elmhurst, SP Crossing. Automatic interlocked. Home signals for main track, two-position color light 523 feet east and 536 feet west of crossing.

Distant signals 3950 feet east and 3550 feet west of home signals are also three-position, color light, automatic block home signals. Trains must approach these signals prepared to stop if indication displayed per Rule 501, Fig. 5. Signals are approach lighted; length of approach circuits 2375 feet east and 2980 feet west of signals.

East switch to Elmhurst siding is within home signal limits and movement over this switch to the main track is governed by a two-position color light dwarf home signal located at the clearance point. The switch is equipped with an electric lock located adjacent to the switch operating stand. Track occupancy on the Western Pacific is denoted by double switch indicator located near the switch.

For movement from siding to main track stop train within 250 feet of dwarf signal. OBSERVE THE SWITCH INDICATORS BEFORE OPENING DOOR ON LOCK. The door should remain closed if one or both switch indicators show track occupied unless it is known that the occupancy is not caused by a train approaching to use the crossing. With the track unoccupied or occupied by other than an approaching train, open the door on the electric lock and proceed according to the instructions posted therein.

For movement from main track to siding, stop train between home signals and at least 50 feet east of switch points. Open door on electric lock and proceed according to instructions posted therein.

Electric lock is not equipped with an emergency release. If lock does not release west siding switch should be used.

If main track home signal indicates STOP upon the approach of a train, or if dwarf home signal indicates STOP with switch in the reverse position, send flagman to the crossing to follow instructions posted in the WP time release housing. If the time release is operated and the signal continues to indicate STOP, be governed by Rule 663.

When a train is delayed after observing a signal displaying a proceed indication, it must proceed at restricted speed expecting the signal to assume a more restrictive indication before it is accepted.

Cars left on Elmhurst siding must be placed at least 300 feet west of dwarf home signal to avoid occupying approach lighting circuit.

Attention is directed to maximum speed of 15 MPH for passenger trains and 10 MPH for freight trains in this territory.

MP 30.3 Niles Tower, SP Crossing. Interlocked.

Home signals 450 feet east and west of crossing, are three-position, color-light, semi-automatic (SA) signals.

Approach indication for eastward trains to both eastward absolute block signal east Niles and home interlocking signal SP crossing is provided on eastward absolute block signal at west Niles. Approach indication for westward trains is provided on westward absolute block signal at east wye switch, Niles Jct.

MP 42.7 and MP 43.0 Radum Tower, SP Crossings. Interlocked.

Home signals 480 feet east of crossing MP 43.0 and 480 feet west of crossing MP 42.7, are two-position, color-light, semi-automatic (SA) signals.

Approach indication for eastward trains is provided on eastward absolute block signal east Pleasanton. Three-position, color-light, automatic block signal 445, located 7400 feet east of east home signal, is approach signal for westward trains.

Towerman on duty daily except Sundays and holidays. During hours towerman is off duty normal operation of signals on WP will be semi-automatic.

In order to avoid delay to trains on opposing route while doing work at Radum train must be left outside of interlocking plant circuit governed by home signals.

MP 74.0 Lyoth Tower, SP Crossing. Interlocked.

Home signal 700 feet west of crossing is three-position, color-light signal.

Home signal 600 feet east of crossing is three-position, color-light, two-unit signal. Upper unit governs main track and lower unit governs movement over crossing and into east end Lyoth siding.

Dwarf signal located between main track and siding governs movement from siding to main track.

All three signals are semi-automatic (SA) absolute block signals. Trains stopped by these signals will be governed by interlocking rules within the interlocking limits and A.A.B.S. rules for movements beyond interlocking home signals in main track blocks.

Approach indication for eastward trains is provided on eastward absolute block signals at east Carbona and for westward trains on westward absolute block signals west Fitz.

Following are whistle signals: Westward trains desiring to enter siding — one long one short. Eastward trains desiring to leave siding — one short one long.

In order to avoid delay to trains on opposing route while doing work at Lyoth train must be left outside of interlocking plant circuit governed by home signals.

MP 84.45 SP Crossing. Interlocked.

Home signal 650 feet east of crossing is two-position, color-light, semi-automatic (SA) signal and home signal 650 feet west of crossing is three-position, color-light, semi-automatic (SA) signal.

Three-position, color-light, automatic block signal 828, located 8250 feet west of west home signal, is approach signal for eastward trains.

Approach indication for westward trains is provided on westward absolute block signals west Lathrop and on dwarf signal at crossover west end of Army Supply Depot track.

When switching is done on main track at east Quigley, west Lathrop or crossover west end of Army Supply Depot track, signal operator in SP depot Lathrop must be notified by telephone length of time to be used so signal lineup may be changed if necessary and must also be notified when switching is completed. Telephones located near east switch Quigley, at crossing, and in A.A.B.S. booths west Lathrop and crossover west end Army Supply Depot track.

Maximum speed head end of train between home signals, passenger trains 30 MPH, freight trains 25 MPH.

MP 90.5 Ortega Tower, SP Crossing. Interlocked with Hunter Street track.

Home signals 450 feet east and 230 feet west of crossing on Hunter Street track. No distant signals.

Home signal 450 feet east of crossing is semi-automatic (SA) absolute block signal governing entrance to main track block on westward moves. Connecting switch to main track MP 90.42 must be thrown by hand. If this signal is in STOP position be governed by RULE 663 within interlocking limits and Rule 311 before fouling main track. Telephones for communicating with dispatcher located in tower and in booth adjacent to main track absolute block signals MP 90.4.

Towerman on duty 6:00 p.m. to 3:00 a.m. daily except Sunday.

MP 93.2 AT&SF Tower, AT&SF Crossing. Interlocked. Home signal 450 feet east of crossing. No distant signal. Two-arm home signal 450 feet west of crossing, upper arm governs movement on Western Pacific main track, lower arm governs movement to and over AT&SF main tracks to interchange track. Reflectorized amber approach warning sign located on "RR Crossing One-half Mile" sign 2190 feet west of west home signal. Tower equipped with electric siren. Two short blasts repeated several times is warning to yard and trainmen to clear plant.

Whistle signals: For main track movement both directions — one long. For movements to and from water front — three short and one long.

MP 93.8 Weber Avenue Tower, SP Crossing. Interlocked. Main Track: Home signals 423 feet east and 315 feet west of crossing. No distant signals. Siding: Home signals 428 feet east and 73 feet west of crossing.

MP 95.1 El Pinal Tower, SP Crossing. Interlocked. Home signals 650 feet east and west of crossing. One distant signal 3000 feet east of east home signal.

MP 137.5 "X" Street, CCT and SN Crossing. Automatic interlocked. Home signals 450 feet east and west of crossing. Distant signal 1480 feet west of west home signal. Distant signal, permanently at caution, 1270 feet east of east home signal. If signals are in STOP position send flagman to crossing to operate time release inside box at crossing. Instructions for operation of time release inside of box. If signals remain in STOP position, be governed by Rule 663.

Hayes derail 171 feet east of west switch to interchange track is pipe-connected to main track switch stand and switch must not be closed until rear of train has passed derail.

Switch indicators at head block west switch to interchange track and at entrance switch to Sutton-Morf Tractor Company spur give warning of approach of trains on WP, CCT and SN. When these indicators show "block occupied" and no train or engine is seen or heard approaching, protection must be provided for movement over crossing per Rule 633 (c) after necessary protection has been provided on WP tracks for opening switch and movement made onto WP main track.

MP 138.0 "R" Street Tower, SP Crossing. Interlocked. Two-arm semaphore type home signal 796 feet east of crossing. Upper arm governs main track; lower arm governs leg of wye. Two-unit color-light home signal 700 feet west of crossing. Upper unit governs main track; lower unit governs leg of wye. No distant signals.

Dwarf signal on east leg of wye 165 feet from main track switch governs movement from "R" Street line to main track.

Two-arm dwarf signal on west leg of wye 800 feet from main track switch. Upper arm governs movement from "R" Street line over crossing to WP main track; lower arm governs movement over crossing to California Builders' Supply spur.

Spur serving Valley Wholesale Grocery Co. connected with west leg of wye with switch facing west. Normal position of switch is lined for spur. Indication on eastward home signal on main track is same for movements from main track to either "R" Street line or to spur. Crews desiring to enter spur must advise towerman. Switch cannot be changed while engine or cars are between home signals of plant. Two-position color-light signal on spur governs movements out of spur track.

Following are whistle signals: Main track to wye, either leg, one long, one short. Wye to main track, either leg, one short, one long.

MP 139.2 "C" Street, SN Crossing. Automatic interlocked. Home signals 480 feet east and 450 feet west of crossing. Distant signals, permanently at caution, 3190 feet east and 1584 feet west of home signals. If signals are in STOP position send flagman to crossing to operate time release in box at crossing. Instructions for operation of time release inside of box. If signals remain in STOP position be governed by Rule 663. Switch indicator at head block main track switch to Haggin transfer track gives warning of approach of trains on WP and SN. Hand operated derail on Haggin transfer track 226 feet east of west main track switch.

MP 140.8 Globe, SN Crossing. Interlocked. Manual control two-position color-light signals, approach lighted. Home signals 605 feet east and west of crossing. Distant signals 4200 feet east and 3032 feet west of home signals. Maximum speed head end of train between home signals, passenger trains 30 miles per hour, freight trains 25 miles per hour.

MP 152.5 Sankey, SN Crossing. Automatic interlocked. Home signals 600 feet east and west of crossing. Distant signals 3000 feet east and west of home signals. All signals color-light type approach lighted. If signals are in STOP position, send flagman to crossing to operate time release in box at crossing. Instructions for operation of time release inside of box. If signals remain in STOP position, be governed by Rule 663.

Joint Track Marysville. (See special instructions page 15, Second Subdivision.)

MP 180.2 Binney Jct. Tower, SP Crossing. Interlocked. Home signal 680 feet west of crossing SP main track. Automatic Block Home Signal 1794, located 3722 feet west of home signal, and Dwarf Signal 1796 on siding are also distant signals for Binney Jct.

Semi-automatic (SA) Home Signal 644 feet east of crossing. Distant Signal 1811, 4598 feet east of home signal, is also three-position automatic block home signal for westward trains. All trains must approach this signal prepared to stop if indication displayed per Rule 501, Fig. 5. Signal is approach lighted; length of approach circuit 4039 feet. Sign reading "A.B.S. 4000 feet", located 4000 feet east of signal.

All signals are of color-light type.

San Jose Branch.

MP 19.6 SP Crossing. Not interlocked.

MP 20.2 Willow Glenn, SP Crossing. Interlocked. Semi-automatic (SA) home signals 225 feet east and west of crossing. No distant signals.

MP 22.3 West San Jose, SP Crossing. Interlocked. Home signals 250 feet east and west of crossing. No distant signals.

All trains must come to STOP at home signals, Willow Glenn and West San Jose crossings and a member of crew go to crossing and carefully follow instructions pasted inside of derail lock box at each crossing before proceeding over either crossing.

SPEED RESTRICTIONS

Speed restrictions in miles per hour will apply as follows:

Page No.	BETWEEN	Passenger		Freight	
		Maximum	Restriction	Maximum	Restriction
2-3	First Subdivision	60	..	40	..
	Over, along or upon all streets and highways within Oakland City Limits	..	15	..	10
	Washington and Franklin Sts., Oakland	..	8	..	8
	MP 7.2 over SP Crossing	..	10	..	10
	MP 7.7 SP Crossing Clinton (see Page 18)	..	15	..	10
	MP 9.5 just east 29th Avenue and MP 9.8 just east Fruitvale Avenue	..	10	..	10
	MP 10.3 over SP Crossing	..	10	..	10
	MP 13.7 over SP Crossing	..	15	..	10
	Bridge just west of San Leandro Depot and Williams Street, 5 blocks east of depot	..	20	..	15
	Over "A" and "B" Streets, Hayward	..	45	..	30
	MP 23.93 and MP 24.31	..	45	..	30
	MP 29.4 on curve	..	40	..	30
	Niles and MP 37	..	50	..	30
	Through Tunnels 1 and 2	..	40	..	20
	MP 38.6 on curve SP underpass	..	45	..	30
	MP 40.0 on curve	..	55	..	..
	City Limits Pleasanton	..	15	..	15
	City Limits Livermore	..	25	..	20
	MP 52 and MP 53 on curves	..	45	..	30
	MP 53 and MP 54 on curves	..	35	..	25
	MP 54 and MP 67 on curves	..	50	..	35
	San Joaquin River Drawbridge MP 80.28	..	20	..	15
	MP 84.45 SP Crossing (see Page 18)	..	30	..	25
	MP 90 and MP 92.5 on curves	..	45	..	30
	Charter Way and Stockton Depot, Main Track	..	20	..	20
	Other Tracks	..	8	..	8
	Over interlocking crossings	..	40	..	25
4-5	Second Subdivision				
	Stockton and MP 122	60	..	40	..
	Stockton Depot and over Harding Way, Main Track	..	20	..	20
	Other Tracks	..	8	..	8
	MP 116.07 Mokelumne River Bridge	..	35	..	35
	Bradford Spur	..	..	..	10
	MP 122 and MP 133.5	50	..	35	..
	MP 133.5 and MP 155	60	..	40	..
	Over and between Sutterville Rd. and "C" St., Sacramento	..	15	..	15
	MP 140.8 SN Crossing (see Page 19)	..	30	..	25
	MP 152.5 SN Crossing (see Page 19)	..	30	..	25
	MP 155 and MP 171	50	..	35	..
	MP 171 and MP 185	60	..	40	..
	On curve at Cleveland	..	50	..	35
	Joint track Marysville (see Page 15)	..	25	..	25
	MP 185 and MP 197	50	..	35	..
	MP 197 and Oroville	60	..	40	..
	MP 201.8 on curve	..	40	..	25
	Over interlocking crossings	..	40	..	25
6-7	Third Subdivision				
	Oroville and Bidwell	50	..	35	..
	Bidwell and Bloomer	40	..	30	..
	Bloomer and MP 272.57 (Grays Flat)	35	..	25	..
	Bridge 252.60	..	25	..	20
	MP 272.57 and Quincy Jct.	40	..	30	..
	Over Switch East end Tunnel 32	..	20	..	20
	Quincy Jct. and Portola	50	..	30	..
	Through Tunnel 35	..	..	..	20

SPEED RESTRICTIONS—Continued

Speed restrictions in miles per hour will apply as follows:

Page No.	BETWEEN	Passenger		Freight	
		Maximum	Restriction	Maximum	Restriction
8-9	Fourth Subdivision				
	Keddie and Crescent Mills	35	..	25	..
	Crescent Mills and Greenville	40	..	40	..
	Greenville and Clear Creek Jct.	35	..	25	..
	Clear Creek Jct. and Mason	35	..	30	..
	Clear Creek Jct. and Westwood, on curves	..	25	..	25
	Mason, trains using turnout	..	20	..	20
	Mason and Halls Flat	40	..	40	..
	Halls Flat and Pit River	35	..	25	..
	Halls Flat and Pit River, on curves	..	25	..	..
	On curve west mile board Willow Springs	..	25	..	15
	Pit River and Bieber	40	..	30	..
10	San Jose Branch	30	..	25	..
	Within city limits, San Jose	..	12	..	12
	Over all street and highway crossings within city limits, San Jose	..	5	..	5
11	Carbona Branch	12	..	12	..
	Terminous Branch				
	Terminous Jct. and Garden	20	..	20	..
	Garden and Terminous	15	..	15	..

Passenger trains consisting of conventional passenger equipment or of mixed streamline and conventional equipment when handled by passenger diesel power will be governed by restrictions applying to steam powered passenger trains.

MAXIMUM SPEEDS:

On curved track Third Subdivision enginemen will reduce speed below the maximums provided where necessary to insure safety.

Engines backing—20 miles per hour on straight track. On curves and where track conditions are unfavorable speed must be reduced further to a rate consistent with safety.

Engines running light on main track or branches—speeds prescribed for freight trains.

M-80 engines, All Subdivisions—35 miles per hour.

GS-64-77 Class Engines (Nos. 481-486) must not exceed speeds indicated below over following bridges:

Bridge 18.80......45 MPH
" 20.87......45 "
" 22.11......45 "
" 35.09......35 "
" 37.12......45 "
" 37.36......45 "
Bridge 39.40......45 MPH
" 49.88......45 "
" 53.40......45 "
" 116.28......45 "
" 204.82......30 "

M-137-151 engines:
Handling passenger trains......speeds prescribed for freight trains
Over Bridge 317.43..............25 miles per hour in trains or light
Second Subdivision................30 " " " " " "
Fourth Subdivision
Btw. Keddie and Greenville....25 " " " " " "
" Greenville and Almanor...20 " " " " " "
" Almanor and Westwood...25 " " " " " "
" Westwood and Halls Flat...30 " " " " " "
" Halls Flat and Bieber.....25 " " " " " "
" Halls Flat and Bieber, on curves descending grade.20 " " " " " "
While engine passing through crossovers or turnouts......... 5 " " " " " "

Passenger trains with cabooses on rear or when handled by C-43, MK-60 or MK-60-71 engine—50 miles per hour.

Trains handling Southern Pacific scale test car will not exceed 40 MPH.

Trains handling steam derricks, steam shovels, cranes, rotary plows or pile drivers, 25 miles per hour First and Second Subdivisions, 20 miles per hour Third and Fourth Subdivisions.

Trains handling triple loads of poles, 20 miles per hour Third and Fourth Subdivisions and between Carbona and Oakland.

Trains handling logs, 25 miles per hour. When two trains meet, either of which are handling logs, the standing train will remain standing until other train has cleared or come to a stop unless necessary to saw by. Maximum speed of train passing, 15 miles per hour.

All trains or engines through turnouts, crossovers, sidings and other inside tracks, 10 MPH.

MISCELLANEOUS

Dead engines handled in trains must be placed approximately 10 cars behind train engine.

When steam derrick is handled with Mallet or D-225 engine, there must be at least two cars between engine and derrick.

DOUBLEHEADING. When D-225, M-80, M-137-151, GS-64-77, MK-60, MK-60-71 or MTP-44 engines are in a train with another engine of any class, either in service or dead, they must be spaced at least 10 cars apart, except MTP-44 engines may be doubleheaded with TP-29 engines; on Third Subdivision and between Stockton Yard and Altamont MTP-44 engines may be doubleheaded with C-43 engines; on First and Second Subdivisions MK-60 or MK-60-71 engines may be doubleheaded with TP-29 engines, and on Fourth Subdivision M-80, MK-60 or MK-60-71 engines may be doubleheaded with C-43 or TP-29 engines; also two M-80 engines, a D-225 and M-80 engine or an M-137-151 and M-80 engine may be doubleheaded between Bieber and Halls Flat.

In emergency D-176 Passenger Diesel engines may be doubleheaded with TP-29, C-43, MTP-44, MK-60, MK-60-71, M-80 or D-225 engines.

When a TP-29 engine is doubleheaded on a passenger train over a passenger district with another engine of greater pump capacity it should be placed next to train. When used as a helper over part of the passenger district it should be placed in the lead, except when train consists of more than 16 cars, in which case the TP-29 engine should be next to train unless emergency or other causes make it impossible to do so.

MK-60 or MK-60-71 engine being doubleheaded with TP-29 engine will not exceed 35 miles per hour over Bridges 24.31, 29.24, 35.09, 37.12, 38.69, 49.88, 53.40, 56.96, 64.43, 79.41, 80.37, 116.28, 116.37 and 166.25.

MTP-44 engine being doubleheaded with TP-29 engine, C-43 engine being doubleheaded with C-43 or TP-29 engine, or running light coupled, will not exceed 35 miles per hour over Bridge 64.43.

MTP-44 engine being doubleheaded with C-43 engine, or running light coupled, will not exceed 35 miles per hour over Bridges 56.96, 64.43, 79.41 and 80.37.

MK-60 or MK-60-71 engine and M-80 engine being doubleheaded with C-43 or TP-29 engine on Fourth Subdivision will not exceed 25 miles per hour over Bridges 9.04, 9.29, 9.45 and 9.79.

TRIPLEHEADING of locomotives of any class, running light or handling train, is prohibited.

DIESEL ENGINES. Diesel freight engines dead in train must have qualified messenger. In both cabs automatic brake valves must be cut out and brake valve handles locked in running position; independent brake valve handles locked in running position (locking pins are provided for this); dead engine features cut in; all isolation switches placed in "start" position; all switches at engineer's control stand locked in "off" position and main battery switches pulled; reverses locked in neutral position in all units. Messenger should watch brake cylinder pressure in cab nearest to locomotive handling train. Distributing valve pops must be set to 25 pounds pressure. Maximum speed 60 miles per hour.

Diesel switch engines dead in train must have qualified messenger. Automatic brake valve must be cut out and handle placed in running position; distributing valve pop set to 15 pounds pressure; dead engine feature cut in; main battery switch pulled and reversers locked in neutral position. Maximum speed 45 miles per hour.

During freezing weather engine water cooling system must be drained on any type Diesel engine being towed.

TONNAGE RATING

Engine Class	1st Sub-division	2nd Sub-division	3rd Sub-division	4th Subdivision		
				Keddie to Greenville	Greenville to Almanor	Almanor to Bieber
Eastward						
TP-29....	1073	2200	812	585	401	585
MTP-44....	1650	5000	1250	900	617	900
C-43....	1650	5000	1250	900	617	900
MK-60....	2500	6000	1800	1250	858	1250
MK-60-71..	2700	6000	1800	1250	858	1250
GS-64-77..	2800	6000	1900	1250	858	1250
M-80....	3000	6000	2200	1690	1170	1690
M-137-151	5000	6000	4000	2800	1900	2800
D-176**	2800	6000	1900	1250	858	1250
D-225***	5800	6000	4000	3400	2000	3400
				Bieber to Halls Flat	Halls Flat to Keddie	
Westward						
TP-29....	910	2200	*	491	1040	
MTP-44....	1400	5000	*	756	1600	
C-43....	1400	5000	*	756	1600	
MK-60....	2350	6000	*	1051	2200	
MK-60-71..	2500	6000	*	1051	2350	
GS-64-77..	2500	6000	*	1051	2450	
M-80....	2600	6000	*	1427	3500	
M-137-151	4000	6000	*	2200	5500	
D-176**	2500	6000	*	1051	2450	
D-225***	5000	6000	*	2800	6000	

*Descending grade, no tonnage limit.

**Reduce 33⅓ % of tonnage rating for each inoperative Diesel unit.

***Reduce 25% of tonnage rating for each inoperative Diesel unit.

Add five tons friction for each car over 30 cars.

Tonnage rating based on maximum grade each subdivision; between points where grades are less than maximum, greater tonnage can be handled.

TRACKS ON WHICH ENGINE MOVEMENTS RESTRICTED

Location and Description of Track	Class of Engine	Prohibited
Oakland, Kaiser Ready-Mix Spur	C-43 or heavier	Beyond frog
Balloon track	MTP-44 or heavier	"
San Leandro, L. A. Young Spring and Wire Spur	All Classes	Beyond frog
Lady's Choice Food Spur	MTP-44 or heavier	"
Caterpillar Tractor	"	"
Calif. Pack. Corpn.	"	"
Hyrup Spur	"	"
Hayward, Farm Produce Spur	"	"
Poultry Prod. Spur	"	"
Niles, Transfer Track	MTP-44 or heavier	Beyond frog
P.C.A. Gravel Plant	"	On trestle
" " "	All Classes	Beyond trestle
Goad Spur	All Classes	300 feet beyond switch
San Jose Branch	MTP-44 or heavier	On entire Branch from a point one-fourth mile east of Tail of Wye at Niles Jct.**
Radum	All Classes	Beyond frog on all tracks except 1 and 2
Livermore, Brick Yard Track	MTP-44 or heavier	Beyond frog
Stock Track	"	"
Altamont	MTP-44	Beyond frog either leg of wye
Carbona, Track No. 2 (Tomato Spur)	MTP-44, GS-64-77 M-137-151	Beyond frog
Bean Spur	"	"
Carbona Branch (Main Track)	MT-44 or heavier	Beyond West Switch Kerlinger
Spur MP 0.5	"	Beyond frog
Kerlinger Pit	C-43 or heavier	Beyond frogs either end pit track
	MTP-44 or heavier (except Diesel switch engines)	Beyond frogs on siding and on boarding house spur
River Rock	Diesel 581 class	East of switch
Main Trk.	C-43 or heavier	Beyond Moy Stock Yards
Lyoth, Standard Oil Spur	All Classes	Beyond sign 225 feet from switch
Stockton, North Channel Spur	MTP-44 or heavier	Beyond frog
Harte Spur	All Classes	Beyond Br. 100.56
Terminous Branch	MTP-44 or heavier	On entire Branch
Villinger Spur	MTP-44 or heavier	On No. 1 track beyond 165 feet from No. 2 track switch
	GS-64-77 or heavier	Beyond frog
Glannvale, Stock Yard Spur	All Classes	Beyond stock chute
	GS-64-77 or heavier	Beyond frog
Bradford Winery	MTP-44 or heavier	Beyond frog
So. Sacramento, Track 68	"	Beyond clearance point

**MTP-44 engines may be used on San Jose Branch when authorized by Chief Dispatcher.

Tracks on which engine movements restricted (continued)

Location and Description of Track	Class of Engine	Prohibited
Sacramento, Old House Track (T&XSt)	MTP-44 or heavier	Beyond frog
"R" Street Line	MK-60 or heavier	Beyond 17th Street
Pleasant Grove, House Track	MTP-44 or heavier	Beyond depot
Trowbridge, Rice Growers Elevator Spur	"	Beyond frog
Team Track	"	"
East Arboga, Outfit Spur	All Classes	Beyond 300 feet from frog
	GS-64-77 or heavier	Beyond frog
Cleveland Spur	MTP-44 or heavier	"
Marysville, Both old SN Passgr. Conn.	All Classes	"
Old Frt. House and Sand Plant	MTP-44 or heavier	Beyond SN Crossing
Cliff House Spur	All Classes	Beyond frog
High Line	MTP-44 or heavier	"
Graybros Spur	"	"
Craig Spur	"	"
Vista Robles Spur	GS-64-77 or heavier	"
Adelaide Spur (Oroville Yard)	MTP-44 or heavier	"
Pond Track	All Classes	"
Oroville, Dant and Russell Spur	MTP-44 or heavier	Beyond clearance point
SN Transfer	"	"
Hokes Spur	"	"
Mt. Ida Spur	"	"
Ehman Spur	"	"
Sunkist Spur	"	"
Coach Spur—House Track	"	Beyond 85 lb. rail (740 ft. from Main Track)
Land—See special instructions, page 16, under "Third Subdivision"		
Bloomer, River Spur	All Classes	Beyond frog
Berry Creek, House Spur	MTP-44 or heavier All Classes	Beyond clearance point Beyond water column
Blinzig Spur	MTP-44 or heavier	Beyond clearance point
Jarbo Spur	"	Beyond 500 ft. from frog
Grizzly Spur	"	Beyond frog
Rock Creek, Outfit Spur	"	Beyond clearance point
Highway Spur	"	"
Tobin, River Spur No. 1	"	"
Loading Track	"	"
River Spur No. 2	All Classes	"
Belden, House Track Spur	MTP-44 or heavier All Classes	Beyond frog Beyond MP 260
Rich Bar, Outfit Spur	MTP-44 or heavier	Beyond clearance point
Virgilia, River Spur	"	"
Twain, Outfit Spur	"	Beyond frog
Paxton, House Track	"	Beyond clearance point
Stoddard Spur	"	Beyond frog
Keddie, Kelly Spur	"	"
Depot Back Track Spur	"	"
West Leg of Wye	All Classes	Except C-43 or lighter may use in emergency

Tracks on which engine movements restricted (continued)

Location and Description of Track	Class of Engine	Prohibited
Spring Garden, Stock Track	MTP-44 or heavier	West of Stock Chute
Back Track	"	Beyond frog
Sloat, Log Spur	"	Beyond frog
All Mill Tracks	"	"
Cromberg Siding	"	Beyond clearance point
Blairsden, Richfield Oil Spur	"	Beyond frog
Graeagle, All Tracks	"	Beyond sign 1166 feet east of house track switch Blairsden
Log Unloading Track	All Classes	Beyond west end log unloading dock Beyond sign at beginning of 20 degree curve between west end box factory and moulding mill
Clio Spur	MTP-44 or heavier	Beyond frog
Crescent Mills, Standard Oil Spur	M-137-151 Class	Beyond frog
Box, Setzer Lbr. Co.	"	"
MP K-21.03, Tunnel Spur	"	"
Rollo Spur	"	"
Clear Creek Jct., Almanor RR	"	"
Westwood, Fredonia Track and Standard Oil Spur***	D-225, MK-60, MK-60-71, M-80 and M-137-151 (also SP engines of similar weight and type)	Beyond frog***
Oil Spur off F.G.S. House Track	M-137-151	Beyond frog
Electric Siding	"	West of crossover
Both Legs F.G.S. Wye	M-80 or heavier	Beyond frog
All Mill Spurs leading off of Track No. 4	"	"
Roundhouse lead	"	"
Poison Lake, Spur off west leg of wye	All Classes	Beyond frog
Either Leg of Wye	M-137-151 and D-225	Beyond clearance point
Halls Flat, Logging Industry Track	M-137-151 or heavier	Beyond clearance point
West switch F.G.S. Wye at Camp Bunyon	M-80 or heavier	Beyond frog
Butte Valley Lbr. Co. Spur	MTP-44, MK-60, MK-60-71 and M-137-151	Beyond frog

***Necessary have hold of at least 4 cars to switch Standard Oil Spur.

Track restrictions applying to MTP-44 or heavier engines, do not apply to 551-558 (S-57) and 581-585 (S-60) Class Diesel switch engines, except 581-585 (S-60) Class must be separated from any loaded cars by at least one empty car while handling cars over Smith Canal Drawbridge, North Channel Line, Stockton.

ABSOLUTE AUTOMATIC BLOCK SYSTEM—SPECIAL INSTRUCTIONS

(A) Absolute Automatic Block System extends between Clinton, MP 7.7, and entering crossover MP 91 Stockton Yard.

(B) Trains will operate by timetable and train order authority over First Subdivision but within absolute automatic block system limits will be governed by signal indications which supersede the superiority of trains.

(C) Trains will maintain their authorized identity, continue to display classification signals and regular trains will respect their timetable schedules through A.A.B.S. limits.

(D) Signals within A.A.B.S. limits are color-light type. Those at entrance to sidings are located 300 feet beyond switch. As "line switch indicator" thereon may require that trains enter siding, stop should be made back of switch when such signals display STOP indication.

(E) **RULE 83-D.** If Altamont is the initial station, clearance card is not required when there is no operator on duty.

(F) **RULE 105.** Main track only is included in signal circuits. Sidings and other tracks are not included and trains entering and using such tracks must proceed with caution.

(G) **RULES 282 and 285.** At Livermore and Pleasanton, when signal indications require reduction to medium speed, trains will be governed by the following within city limits:

Between	Passenger	Freight
Livermore—MP 46.84 and MP 48.3	25 MPH	20 MPH
Pleasanton—MP 41.12 and MP 41.74	15 MPH	15 MPH

(H) **RULE 303.** Rule 93 applies within A.A.B.S. limits and trains or engines using main track within yard limits by signal indication or by authority of train dispatcher need not provide flag protection except against first-class trains. Authority from train dispatcher is required to use main track for switching within yard limits same as at stations outside yard limits.

(I) **RULE 317.** Electrically-locked switches located as follows:

Niles Junction, west wye switch
Goad
Trevarno
Redmond Cut, east and west switches
Valpico, east and west switches
Stockton Yard, Union Stockyards MP 90.3

Telephones for communicating with dispatcher are located in concrete telephone booths adjacent to switches. Instructions for operating electric locks posted in telephone booths adjacent thereto.

In order to release electric locks for entrance to electrically-locked switches (except at Stockton Yard, Union Stockyards) a part of engine or cars must be standing ahead of switch within the release circuit. Release circuit extends from a point approximately 50 feet ahead of switch points to a point approximately 130 feet ahead of switch points, except at Niles Junction. (See special instructions under Section (L) for release circuit at Niles Junction.)

(J) Trains in either direction approach A.A.B.S. limits with caution, whether entering or leaving A.A.B.S. limits.

(K) **Niles.** Crossover between main track and siding just east of house track switch is not electrically-locked and must not be used to enter main track block unless part of train already is on main track within the block.

(L) **Niles Junction.** Absolute block signals at east wye switch govern movement to and from east leg of wye.

West wye switch electrically-locked and pipe-connected to switch to outfit spur off west leg of wye, which will serve as a derail. Release circuit extends from 50 feet west of switch points to home interlocking signal 450 feet east of SP crossing MP 30.3.

(M) **Radum.** Switches to Henry J. Kaiser Company trackage, west switch located 10 feet east of east home signal, are not interlocked or electrically-locked. (See second paragraph Rule 310.)

(N) **Carbona.** The south siding is the designated track to be used for meeting or passing of trains. Permission from dispatcher is required to enter north siding after entering main track block by signal indication at east or west Carbona. Entrance from north siding to main track governed by signal indication. Dispatcher cannot clear entrance signals from north siding to main track when main track block is occupied and Rules 312 or 314 will apply under these circumstances.

(O) **Lyoth.** No signal is provided for eastward trains to take siding. Dispatcher may, when desired, instruct eastward trains to do so.

Absolute block signal on west end of siding governs entrance of westward trains to main track block. Movements to and from east end of siding are governed by interlocking signals, Lyoth crossing, which are also semi-automatic (SA) absolute block signals.

Crossover between main track and siding is not electrically-locked and must not be used to enter main track block unless part of train already is on main track within the block.

(P) **Quigley.** Siding and house track switches not interlocked or electrically locked. (See Rule 310.)

(Q) **Lathrop.** Trains switching between west end of Lathrop or crossover west end of Army Supply Depot track and home interlocking signal east of Lathrop crossing, in addition to obtaining authority from train dispatcher must notify signal operator SP Lathrop before switching is commenced and after it is completed. Telephones for this purpose located in A.A.B.S. telephone booths west end Lathrop siding and crossover west end of Army Supply Depot tracks.

ABSOLUTE AUTOMATIC BLOCK SYSTEM—SPECIAL INSTRUCTIONS (Continued)

(R) **Army Supply Depot.** No signals for movement from main track to Army Supply Depot tracks. Trains clearing main track on these tracks must notify dispatcher when they have done so.

Entrance to main track through crossover at west end is governed by dwarf signal. At east end, signal located just west of switch points inside switch governs entrance to main track from either No. 1 track or lead. Signal is not affected by position of inside switch.

(S) **Fitz, Army Supply Depot and Stockton Yard.** Inside switches of crossovers east Fitz, west end Army Supply Depot track and MP 90.4 and MP 91, Stockton Yard, normally lined for tail track or lead. Inside signals at these locations govern entrance to main track only. They are not illuminated unless one or both crossover switches are lined and do not affect movements on tail track or lead other than to main track.

The "S" unit on signal mast will be illuminated when dispatcher authorizes switches to be lined and signal will light when switches are changed. Neither switch to crossover may be changed unless "S" unit is illuminated.

Trains leaving main track at these locations must line both switches of crossover when "S" unit is illuminated on main track signal and return both switches to normal position when movement is completed.

(T) **Stockton Yard.** Westward Automatic Block Signal 921, located 6400 feet east of westward absolute block signal at MP 91, governs approach of trains to that signal.

Eastward Signal 910, located 300 feet east of entering crossover, in service as an automatic block signal (not absolute block signal) but is connected to A.A.B.S. control board and must be cleared by train dispatcher. When in STOP position Signal 910 must not be passed without first obtaining permission from the train dispatcher. Thereafter Rule 509 will apply. This signal is located at A.A.B.S. limits and does not supersede superiority of trains east of that point. Rule 93 applies between east A.A.B.S. limits and east yard limit sign.

When westward trains leaving Stockton Yard do not find the "S" illuminated on inside leaving signal at crossovers MP 90.4 or MP 91 member of crew must call dispatcher. Telephones located north side of main track opposite these signals.

Absolute block signals located at Ortega connection, MP 90.4. Eastward trains, caboose hops or light engines will be governed by signal indications entering Stockton Yard. Eastward trains which head in at MP 91 call yardmaster on telephone located near switch for track instructions. Eastward caboose hops and light engines which head in at MP 90.4 will proceed via No. 3 lead and No. 15 track to yard office and roundhouse track. Eastward trains which head in at MP 90.4 by signal indication stop at train yard lead MP 91 and call yardmaster for track instructions.

(U) **Ortega - Hunter Street Line.** See instructions on page 19 under Ortega Tower governing westward movement to main track. For movements main track to Hunter Street line indication first must be received on eastward absolute block signal MP 90.4 permitting entrance into block. Switch points are immediately east of signal and when switch is thrown signal will change to STOP. Under these conditions the absolute signal in STOP position may be passed without further authority.

INSTRUCTIONS GOVERNING OPERATIONS BETWEEN OROVILLE YARD AND WEST END C. T. C.

(A) Movement of trains and engines between west end of C.T.C. (MP 205.5) and east entrance switch to Oroville Yard (MP 203.8) is governed by interlocking signals under control of operator at Oroville passenger station. Interlocking signals on main track are located at east switch Oroville siding (westward signal, joint C. T. C. and interlocking), west switch Oroville siding and east entrance switch to Oroville train yard. Interlocking rules apply.

(B) Switches are hand-operated except east siding switch, Oroville.

(C) Trains must not exceed 25 miles per hour through interlocking limits.

(D) Westward first-class trains will be authorized by clearance card or train order at Oroville. Train orders may be issued for extra trains to or from Oroville in connection with movement on Second Subdivision beyond Oroville Yard. Eastward first-class trains will be authorized at Oroville and eastward extra trains at Oroville Yard or Oroville by clearance card addressed as instructed by dispatcher, but must not leave until given permission by C. T. C. dispatcher after member of crew has advised him they are ready to leave.

(E) When crew changes are made at Oroville on eastward trains, after permission to leave is obtained from C. T. C. dispatcher movement may be made with caution to eastward C. T. C. absolute leaving signal at east end of siding.

(F) Westward absolute C. T. C. and interlocking signal at west end of C. T. C. is jointly controlled by C. T. C. dispatcher and signal operator, Oroville. C. T. C. rules apply as far as sign "End CTC" and interlocking rules beyond. Authority is required first from C. T. C. dispatcher and, second, from signal operator to pass this signal in stop position or to work with east siding switch in hand throw position.

(G) Eastward absolute C. T. C. signals on main track and siding at east end of siding, Oroville, are under exclusive control of C. T. C. dispatcher and the east switch of siding is dual-control, power-operated under his control.

(H) **RULE 105.** Oroville is not a controlled siding. Tracks at Oroville, Oroville Yard and between, other than main track, are not included in signal circuits beyond clearance points from main track switches.

(I) Eastward three-position color-light automatic block home signals, approach lighted, are located at MP 201.6 and MP 202.6 (west end of Oroville Yard). Approach circuit begins at MP 200.8, 4000 feet west of Signal 2016.

(J) All signals are of color-light type and are single unit except westward C. T. C. and interlocking signal at east end Oroville siding and as listed herein.

Two-unit signals are located as follows:

Eastward: Leaving signal south side of No. 1 track at east entrance switch to Oroville train yard (MP 203.8).
West switch to siding, Oroville.

Westward: East entrance switch to Oroville train yard (MP 203.8).

Indications on two-unit signals are as follows:

Red over red —Stop.

Red over yellow—Proceed on diverging route with caution.

Yellow over red —Proceed prepared to stop at next home signal.

Green over red —Proceed except on diverging route.

(K) The two-unit signals listed above and, in addition, the westward single-unit dwarf leaving-siding signal at west end of siding, Oroville, have on the signal mast a unit, which when illuminated displays a letter "S" on a black background. When the "S" is illuminated it is an indication that signal operator desires the switch or switches to be lined. If the train is on the main track, switches are to be lined for the diverging route. If the train is on the siding at Oroville or on yard track in Oroville Yard switches are to be lined for movement to the main track. After switches are lined, the lamp in the "S" unit will be extinguished and the signal will show indication for movement over the route lined. When it is desired to make a movement at these locations requiring switches to be changed, signal operator first must be contacted, then when "S" is illuminated switches may be changed. They must not be changed unless the "S" is illuminated except when working over switch by permission of signal operator in accordance with Section (P) of these instructions.

(L) Main track and crossover switches must be left lined for straight track after being used. It is not necessary to contact signal operator in connection with lining switches back.

(M) When trains or engines are stopped by an interlocking signal and "S" is not illuminated at signals so equipped, signal operator must be contacted for instructions.

(N) At east entrance switch to Oroville Yard train yard, the normal route for eastward trains leaving from any of the yard tracks is through crossover to main track. When switches are lined for movement eastward from yard tracks to main track, signal will indicate "Proceed prepared to stop at next home signal". When switches are lined for movement from train yard tracks eastward on drill track, signal will indicate "Proceed on diverging route with caution". See last paragraph Rule 104(C).

(O) At east entrance switch to Oroville Yard train yard, westward main track signal is semi-automatic (SA). Interlocking limits extend to the eastward interlocking signal on cantilever and to eastward leaving signal from yard. The automatic portion of the block beyond the interlocking limits extends to "Block System Limit" sign at MP 202.7.

When this signal displays green over red or yellow over red aspect, trains are thereby given superiority over all trains to the "Block System Limit" sign at MP 202.7, and will hold main track at Oroville Yard, but when the yellow over red aspect is displayed all trains or engines must move with caution west of the interlocking limits.

(P) When switching is to be done over any switch within interlocking limits, FIRST obtain permission from the signal operator, after which movements may be made without regard to signal indications within the limits of the block or blocks. All movements must be made with caution when working under such permission. Signal operator must be notified when work is completed.

If signal operator specifies clock time during which block or blocks may be used, new authorization must be obtained if the work is not finished within the time specified. (Also see instructions in Section (S).

When signal operator gives such permission at east entrance switch to Oroville Yard train yard he can provide signal protection against eastward moves only within interlocking limits; therefore Rule 509 applies to all movements on main track west of the eastward interlocking signal on cantilever under this permission.

(Q) **RULE 670.** It will not be necessary to secure permission from signal operator for each individual reverse movement provided permission has first been obtained for moves planned. When a reverse movement is made, trains or engines must move with caution until next signal in direction of movement is reached.

(R) Main track switches at following locations are included in the circuits and entrance to main track is governed by indications of single-unit dwarf interlocking signals:

Dant & Russell Lumber Co. spur, MP 204.2.
East switch to drill track, east end Oroville Yard, MP 204.3.
SN transfer, MP 204.35.
Mt. Ida spur, MP 204.45.
Ehman spur, MP 204.5.
House track, Oroville.

(S) When engines have entered tracks listed in Section (R), closed switch and left main track unoccupied, permission must be obtained from signal operator before again lining switch for movement to main track. This applies regardless of whether permission has been obtained from signal operator in accordance with Section (P).

INSTRUCTIONS GOVERNING OPERATIONS BETWEEN OROVILLE YARD AND WEST END C. T. C.—(Continued)

(T) **RULE 671.** When necessary, running switches may be made over the switches listed in Section (R).

(U) Howler, controlled by signal operator, is installed near Sacramento Northern transfer switch. When this howler is operated, main track must be cleared without delay.

(V) Double switch indicators located at following main track switches:

Crossover switch, MP 202.65 (First switch east of Signal 2026, west end Oroville Yard).
Crossover switch to west train yard.
Adelaide spur.
West switch gravel pit track.
East switch gravel pit track.

(W) A double switch indicator is located also at west switch to west drill track. When entering main track at this point three minutes must elapse after switch is lined before main track is fouled and a member of crew must remain at switch during the interval.

(X) Telephones for purpose of communicating with signal operator or C. T. C. dispatcher are in telephone booths adjacent to following locations:
East switch gravel pit track.
*East entrance switch to train yard, MP 203.8.
East drill track switch.
SN transfer switch.
West siding switch, Oroville.
*East end station platform, Oroville.
*House track switch.
*East siding switch, Oroville (Telephone in instrument house).

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*Connected with either C. T. C. dispatcher or signal operator. Locations not so marked are connected only with signal operator.

CENTRALIZED TRAFFIC CONTROL—SPECIAL INSTRUCTIONS

(A) Centralized Traffic Control extends from MP 320.035 (Delleker) to MP 205.5 (eastward absolute signals 252 feet west of east siding switch, Oroville, on main track and 183 feet west of east siding switch, Oroville, on siding).

(B) Train movements between Portola passenger station and Delleker will be by signal indication and in accordance with special instructions; between Delleker and west end of C. T. C. by signal indication under C. T. C. rules; between west end of C. T. C. and Oroville Yard by signal indication under interlocking rules and in accordance with special instructions.

(C) Signals within C. T. C. limits, at Portola and between Oroville and Oroville Yard are color-light type signals.

(D) **RULES 95 and 97.** Oroville is the terminal for first-class trains and Oroville Yard the terminal for extra trains, Third Subdivision. First-class trains or sections thereof will be authorized at Portola or Oroville by clearance card, addressed as instructed by dispatcher. If sections are authorized clearance card will designate whether or not signals are to be displayed. Extra trains, including work extras, will be authorized at their initial station by clearance card, addressed as instructed by dispatcher, and will not require running orders for movement to Oroville Yard or Portola. All trains will register; also display signals in the usual manner.

(E) **RULE 83.** Registers need not be checked in connection with movement of Third Subdivision trains, including movements between Oroville and Oroville Yard.

(F) **RULE 85.** Within C. T. C. limits a section may pass and run ahead of another section of the same schedule without exchanging train orders, signals or numbers.

(G) **RULE 105.** Owing to the fact that certain switches leading into controlled sidings are not electrically locked, particular attention is directed to fact that this rule applies on controlled sidings as well as on other tracks. See Rule 772(d).

(H) Slide detector fences are located at east and west portals of Tunnel 7 and east portal Tunnel 8. Eastward Signal P-2258 and westward Signal P-2295 are equipped with triangular number plates and are actuated by these devices.

Slide detector fences are located between MP 236.2 and MP 237.33. Eastward Signals P-2362, P-2368, and westward Signals P-2371 and P-2379 are actuated by these devices.

Slide detector fence located west portal Tunnel 13. Eastward absolute signal at east end of Cresta and westward intermediate signal P-2457 are actuated by this device.

Slide detector fence located at MP 265.0. Westward Intermediate Signal P-2675 and westward and eastward absolute signals east end of Rich Bar are actuated by this device.

(I) At MP 280.34, switch leading to west leg of wye is electrically locked with ground throw stand. Electrically locked derail located on west leg of Wye 800 feet east of west switch (128 feet east of Bridge 280.51). When track is occupied on wye between this derail and west switch, block is held on main track Third Subdivision, and must not be occupied except in connection with through movements into or out of main track circuits.

Telephone for communicating with dispatcher is located on south side of main track at east end of Tunnel 32. Both electric locks may be released by dispatcher after door is opened on electric lock at west leg of wye switch MP 280.48.

(J) **Keddie Yard.** All switches leading in or out of siding (No. 1 track), except inside switch to Upper Crossover, must be left lined for the siding. Derailing switch at west end of siding is dual-control, power-operated and when in power position works simultaneously with west siding switch. When west siding switch is in hand-operated position, derailing switch must also be hand operated.

Eastward dwarf absolute signal just west of inside crossover switch, Upper Crossover, will govern movement of eastward trains or engines from siding to main track, and from siding to tail track.

Both switches of west crossover between No. 1 track and N.C.E. lead are included in circuits of eastward absolute entering signal west end Keddie siding. These switches must be left lined for No. 1 track and N.C.E. lead respectively when not in use.

Engines cannot take oil or water from east end of siding (No. 1 track) without fouling detector circuit which protects main track. Engines on siding requiring oil and water must not go beyond eastward dwarf absolute signal unless it shows indication per Rule 752, Fig. 6, or Rule 755, Fig. 6, with both switches of Upper Crossover lined for main track. If movement on main track prevents display of proceed signal to main track, engines may take oil and water by heading toward tail track. Trains or engines may be headed to tail track by making arrangements with C. T. C. dispatcher to release electric lock on switch to tail track (first inside switch east of Upper Crossover) and lining switch by hand. After reversing tail track switch and inside switch to Upper Crossover, signal will display indication per Rule 754, Fig. 2, for movement to tail track.

(K) Sidings shown on pages 6 and 7 are controlled sidings except Oroville Yard, Oroville and Portola.

East and west siding switches at these points are dual-control, power-operated. East siding switch at Oroville is dual-control, power-operated.

Telephones for communicating with dispatcher are located just inside doors of instrument houses adjacent to switches. At west end of Belden there is an additional telephone for communicating with dispatcher in telephone booth opposite eastward absolute signal just west of Tunnel 22.

Cars must not be left on controlled sidings except in case of emergency and then only after notifying C. T. C. dispatcher.

(L) All hand-operated switches in main track within C. T. C. limits are electrically locked. Instructions covering their operation and telephones for communicating with dispatcher are in small telephone booths adjacent to electric locks except at Delleker and Tobin, where they are in instrument houses.

(M) Each hand-operated, electrically-locked main track switch is protected by derail except Middle and Lower Crossover switches, Keddie. These derails are pipe connected to the main track switch stand and before lining switch care must be used to insure that all wheels have passed beyond derail.

East house track switch, Quincy Junction, operates derails on both east end house track and east end interchange track simultaneously.

(N) At Keddie, switch from tail track to roundhouse lead (first inside switch east of Upper Crossover) is electrically locked. Instructions and telephone are in instrument house across main track from lock. This switch is not protected by derail.

Hayes derail installed on tail track 75 feet east of inside switch to upper crossover and pipe connected to that switch.

When lining rip track lead switch for tail track first have electric lock 126-A released and line switch for tail track, then line inside switch to upper crossover and pipe connected derail for tail track. Movement must not be made west of rip track lead switch or on tail track east of eastward dwarf absolute signal at inside switch to upper crossover until this is done.

After this lineup is made, rip track lead switch must not be lined back until engine or cars are clear of section of tail track between dwarf signal and derail. Main track absolute signals at west Sierra and east Keddie are thrown to STOP if rip lead switch is changed while this section of track is occupied.

(O) Where train order signals are in service they must be respected in accordance with Rules 221 and 221(A) except that 9th, 10th, 12th and 13th paragraphs of Rule 221 do not apply within C. T. C. limits when C. T. C. system is operative.

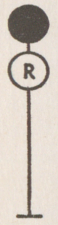
(P) Rules 14 (k), 72, S-72 (except as provided by Rule S-88), 73 and 92 (except as provided by C. T. C. S. Rule 780 and special instructions on pages 6 and 7) do not apply within C. T. C. limits.

(Q) Rules 14(n), 16(l), S-17, 19(A), S-71, 86, S-87, S-88, S-89, S-90, S-90(A), S-90(B), S-90(C), 91, 93, 93(A), 94 and 97 do not apply within C. T. C. limits when C. T. C. system is operative.

OPERATION OF TRAINS BETWEEN END OF CENTRALIZED TRAFFIC CONTROL AND PORTOLA PASSENGER STATION

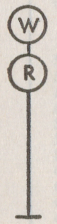
(A) Train and engine movements between East End of Centralized Traffic Control, MP 320.035 (Delleker) and MP 321.386 (Portola passenger station), will be made by block signal indication, and under block signal rules, except as otherwise provided by following rules and special instructions:

(B) Signal Indications are as follows:



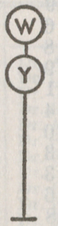
Rule 601

Indication: Stop. Observe Rule 663.



Rule 501

Indication: Stop. Observe Rule 509 (D) or (E)

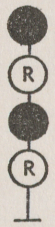


Rule 503

Indication: Proceed prepared to stop at next home signal.

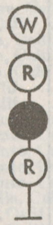
Aspects displayed by westward **MAIN TRACK** leaving signal located near M. P. 320.9 (Snake Lead).

R—Red Y—Yellow W—Lunar White



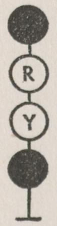
Rule 601

Indication: Stop. Observe Rule 663.



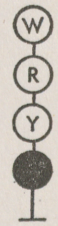
Rule 501

Indication: Stop. Observe Rule 509 (D) or (E)

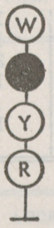


Rule 602A

Indication: Proceed on diverging route with caution.



Rule 502A



Rule 503

Indication: Proceed prepared to stop at next home signal.

Aspects displayed by westward **YARD** leaving signal located between tracks No. 1 and 3 near M. P. 320.9 (Snake Lead).

R—Red Y—Yellow W—Lunar White

(C) **RULES S-71, 72, S-72, 73 and 83.** Superiority of trains is abolished. Schedules shown in timetable are for the purpose of permitting compliance with Rule 780 (C. T. C. S.) and certain special instructions included herein.

(D) All movements in this territory must be made with caution, as prescribed by Rule 93, and will be governed by indication of block signals and switch indicators as follows:

1. Westward signals located at the Snake Lead are equipped with white markers in lieu of number plates. Aspects and indications peculiar to these signals are shown above.
   Trains desiring to enter main track at this point are authorized to operate the crossover switches, provided the east indicator shows clear and the westward (yard) leaving signal displays aspect per Rule 502(A). After the switches have been properly set, the move may be made under the aspect then displayed.
2. The eastward C. T. C. signal at Delleker governs train movements in the block extending eastward from the sign "END CTC" to Signal 3208. For the purpose of identification, a plate bearing the letters "SA" will be displayed on Eastward C. T. C. signal at Delleker, in addition to the letter "A".
   C. T. C. rules will govern west of the sign "END CTC".
3. Westward signal located at clearance point of Lower No. 1 track is equipped with white marker light in lieu of number plate. Aspects and indications are as shown in left column, Section (B).
   When trains or engines desire to enter main track at this point, member of crew will, if east and west indicators are clear, open box on indicator post and operate push button therein. After a time delay the white lights in the box and on the signal will be displayed provided C. T. C. signal at Delleker has not been cleared for an eastward train. After these white lights are displayed switch may be operated and move then made in accordance with signal aspect displayed.
4. All other signals in this area (except those listed in 1, 2 and 3 above) are automatic block signals bearing a number plate for identification.

(E) Rule 512(A) is modified to the extent that rear end protection is not required within these limits. This does not modify Rule 99-A. Trains carrying passengers must be fully protected.

(F) At Portola, yard engines, light engines, switch cuts and others moving within yard must clear main track when required to avoid delay to through trains entering or leaving C. T. C. limits. Howlers, controlled by dispatcher, are provided at following locations:

West roundhouse lead switch.
West train yard lead switch (snake lead).
West switch to No. 10 track.

When these howlers are operated, main track must cleared without delay.

(G) In addition, dispatcher will furnish information to telegrapher, Portola, as to times eastward regular passenger trains or sections thereof are expected to reach Portola. Employees in charge of switch engines, light engines and similar moves must ascertain from telegrapher whether these trains are due before occupying main track and not delay them.

(H) Westward trains will be authorized by clearance at Portola but must not leave until given permission by C. T. C. Dispatcher after member of crew advises him they are ready to leave. Telephones for purpose of communicating with C. T. C. Dispatcher only are located as follows:

Booth on south side of No. 10 track opposite west wye switch.
West train yard lead switch (snake lead).
East roundhouse lead switch (Booth just west of middle car inspectors' shanty).

(I) Push button is located on signal mast, Signal 3208, for the purpose of clearing signal for eastward movements after a westward movement out of train yard. When eastward Signal 3208 indicates "Stop", after being passed on westward move, operate push button and if no train in block, signal will change in sixty seconds to indicate "proceed, prepared to stop at next home signal".

(J) Telephones for communication within Portola Terminal are located as follows:

West train yard lead switch (snake lead).
West car inspectors' shanty (snake lead).
West roundhouse lead switch.
Middle car inspectors' shanty (at east roundhouse lead switch).
East lead switch shanty.

(K) Yard engines, light engines, switch cuts and other similar movements stopped by block signal or switch indicator indication which does not clear within three minutes, and for which reason is not known, will communicate with yardmaster who will arrange to have track cleared or appropriate arrangements made for the desired movement. If unable to contact yardmaster, will be governed by and proceed under Automatic Block Signal Rules.

(L) **Delleker.** Entrance to spur is through electrically-locked, hand-operated switch. Obtain permission from C. T. C. dispatcher (by telephone in instrument house near switch) for movement in and out.

(M) Derails on Delleker spur, West lead lower yard Portola and West end of west siding Portola Yard are pipe connected to main track switches. Switches must not be lined for main track until engines or cars have passed over derail.

SPURS AND COMMERCIAL TRACKS

MAIN LINE

STATIONS	Distance from San Francisco	How Connected	Car Capacity
HUDSON	15.9	1 E	20
ESTUDILLO	16.5	1 E	13
ALVARADO JUNCTION .(P)	24.9	Siding	39
DECOTO	26.6	Siding	18
PABRICO	27.8	1 E	16
EBERLY	28.9	Siding	20
GOAD (P)	32.1	1 E	25
RADUM (P)	43.4	Siding	33
TREVARNO (P)	49.0	1 W	24
REDMOND CUT(P)	59.3	Siding	33
VALPICO (P)	68.3	Siding	30
RHODES	75.6	Siding	26
QUIGLEY (P)	83.8	Siding	95
ARMY SUPPLY DEPOT(P)	85.76	Siding	130
HARTE	100.5	1 W	18
ALSCO	106.8	Siding	20
VILLINGER	107.8	1 W	13
LAS VINAS	109.5	Siding	50
BRADFORD	119.0	1 W	...
ALBERT	127.2	1 W	9
RUNYON	128.7	Siding	20
BOMBAY	146.4	Siding	13
CLEVELAND	176.2	1 W	16
GRAYBROS	187.7	1 W	7
VISTA ROBLES	198.8	1 E	33
ADELAIDE	202.7	1 E	...
LAND (P)	212.2	Siding	28
BRUSH (P)	227.4	1 W	3
BLINZIG (P) (W)	228.6	1 W	11
JARBO (P)	236.1	1 E	17
GRIZZLY (P)	246.1	1 E	11
ROCK CREEK (P)	249.1	Siding	18
DALITE (P)	256.8	1 W	12
GRAY'S FLAT (P)	272.6	1 W	74
STODDARD (P)	279.3	1 W	15
CROMBERG (P)	303.2	Siding	31
FEATHER RIVER INN (P)	309.3	1 E	2

NORTHERN CALIFORNIA EXTENSION

STATIONS	Distance from San Francisco	How Connected	Car Capacity
INDIAN CREEK (P)	283.9	1 W	14
CHENEY LUMBER CO.	294.7	1 E	16
BOX (P)	296.3	1 W	34
ROLLO	302.4	1 W	12
POISON LAKE (P)	351.1	Wye	...
BUTTE VALLEY LBR. CO. (P)	376.4	1 W	10

YARD LIMITS

West MP		East MP
WP Mole	Oakland	13.78
28.50	Niles	31.38
	Niles, San Jose Branch	BR-0.61
BR-14.4	San Jose	BR-23.0
70.14	Carbona	73.05
89.34	Stockton	96.49
MJ-6.0	Terminous	End of Branch
133.4	Sacramento	140.69
177.62	Marysville	180.24
201.44	Oroville	206.0
280.51	Keddie	282.47
	Keddie, 4th Subdivision	K-0.48
319.94	Portola	323.09
K-34.89	Clear Creek Junction	K-35.61
K-38.25	Westwood	SP-409.45 (2¼ miles west of Mason)
K-75.17	Halls Flat	K-78.70
K-111.2	Bieber	GN-86.5 (3.1 miles east of passenger station)

RAILROAD SURGEONS

LOCATION	NAME	TITLE
San Francisco, Calif	Dr. A. R. Kilgore	Chief Surgeon
San Francisco, Calif	Dr. C. E. Smith	Asst. Chief Surgeon
San Francisco, Calif	Dr. G. F. Cushman	Division Surgeon
San Francisco, Calif	Dr. Ruth Fleming	Local Surgeon
San Francisco, Calif	Dr. A. J. Brinckerhoff	Oculist
San Francisco, Calif	Dr. Frank Hand	Aurist
San Francisco, Calif	Dr. F. D. Fellows	Aurist
Oakland, Calif	Dr. Robert R. Thomson	Local Surgeon
Oakland, Calif	Dr. Ray H. Fisher	Local Surgeon
Oakland, Calif	Dr. Fred D. Fisher	Local Surgeon
Oakland, Calif	Dr. Stanley S. Davis	Local Surgeon
Oakland, Calif	Dr. L. L. Coleman	Local Surgeon
Oakland, Calif	Dr. John Paul Evans	Asst. Local Surgeon
Berkeley, Calif	Dr. M. C. Cheney	Local Surgeon
Berkeley, Calif	Dr. W. B. McKnight	Local Surgeon
Berkeley, Calif	Dr. C. M. Weseman	Aurist
Berkeley, Calif	Dr. Raymond Johanson	Oculist
Alameda, Calif	Dr. D. D. Stafford	Local Surgeon
Alameda, Calif	Dr. John Ohanneson	Asst. Local Surgeon
San Rafael, Calif	Dr. W. M. Edwards	Local Surgeon
Hayward, Calif	Dr. H. C. Crockett	Local Surgeon
Niles, Calif	Dr. E. C. Grau	Local Surgeon
San Jose, Calif	Dr. H. G. Zanger	Local Surgeon
San Jose, Calif	Dr. James M. Geiger	Local Surgeon
Livermore, Calif	Dr. Paul E. Dolan	Local Surgeon
Tracy, Calif	Dr. Marion G. Weitz	Local Surgeon
Stockton, Calif	Dr. E. G. Hermosillo	Local Surgeon
Stockton, Calif	Dr. Henry F. Quinn	Local Surgeon
Stockton, Calif	Dr. Dewey Powell	Oculist and Aurist
Lodi, Calif	Dr. S. W. Leiske	Local Surgeon
Lodi, Calif	Dr. W. G. Fessler	Local Surgeon
Sacramento, Calif	Dr. J. V. Chambers	Local Surgeon
Sacramento, Calif	Dr. D. O. Kilroy	Local Surgeon
Sacramento, Calif	Dr. D. J. Engelberg	Local Surgeon
Sacramento, Calif	Dr. C. C. Gray	Oculist
Sacramento, Calif	Dr. John A. Berg	Oculist
Marysville, Calif	Dr. Philip B. Hoffman	Local Surgeon
Oroville, Calif	Dr. Chas. Benninger	Local Surgeon
Oroville, Calif	Dr. C. L. Craviotto	Local Surgeon
Oroville, Calif	Dr. John E. Patrick	Local Surgeon
Quincy, Calif	Dr. Rex N. Carr	Local Surgeon
Quincy, Calif	Dr. D. I. Bleiberg	Local Surgeon
Greenville, Calif	Dr. Wilbur C. Batson	Local Surgeon
Westwood, Calif	Dr. Herman G. Levin	Local Surgeon
Portola, Calif	Dr. J. D. Coulter	Division Surgeon
Portola, Calif	Dr. Joseph F. Narkevitz	Asst. Division Surgeon

WATCH INSPECTORS

LOCATION	NAME	TITLE
San Francisco, Calif	S. A. Pope	Manager of Time Service
San Francisco, Calif	E. J. Land	Watch Inspector
Oakland, Calif	E. S. Griffin	Watch Inspector
Oakland, Calif	E. W. Becker	Watch Inspector
Oakland, Calif	Leroy D. Wertz	Watch Inspector
San Leandro, Calif	G. C. Foster	Watch Inspector
San Jose, Calif	Kochers	Watch Inspector
Livermore, Calif	C. Harlie Power	Watch Inspector
Stockton, Calif	Conrad Mantele	Watch Inspector
Sacramento, Calif	H. T. Harger	Watch Inspector
Oroville, Calif	Philip K. Schmidt	Watch Inspector
Quincy, Calif	W. H. Powell	Watch Inspector
Portola, Calif	Wm. B. and Allan H. Lindsey	Watch Inspector